# DOES THE STANDARDIZATION OF ADVERTISING FOR A GLOBAL BRAND SIGNIFICANTLY IMPROVE ITS CONSUMER-BASED BRAND EQUITY?

By

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## ABSTRACT

# DOES THE STANDARDIZATION OF ADVERTISING FOR A GLOBAL BRAND SIGNIFICANTLY IMPROVE ITS CONSUMER-BASED BRAND EQUITY?

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This experimental research investigates the impact of the standardization of color, visual and graphic ad elements on consumer-based brand equity. The research examines the degrees of standardization on the basis of the number, type and combination of ad-element components and its effect on brand equity ratings. In this study, standardization is treated as an independent variable, as opposed to most other related research in international advertising, that have explored standardization as a dependent variable. The proposed statistical and research design provides a conceptual and theoretical framework for the implementation of standardization as a means and ways of globalizing ad campaigns to strengthen brand equity of global brands. The findings demonstrate that the more ad elements are standardized, the higher are the brand equity ratings. The study revealed that standardization of the number, type and combination of ad elements, have varying effects on brand equity. It was demonstrated that visual standardization moderates most positively in conjunction with either color standardization or graphic standardization to improve brand equity ratings for an ad campaign and the product. This dissertation establishes that the effect of the standardization of ad elements on brand equity ratings is positively moderated by the prior cognitive and affective reactions toward 'globality of brands'. The findings provide a robust standardization guideline for optimizing the development of global ad campaigns to build strong brand equity in global markets. .

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# INTRODUCTION

"Advertising often has a critical role developing a brand's equity" Sternthal, 2001

The purpose of this experimental research is to empirically examine the effects of the degrees of the standardization of color, visual and graphic ad elements in an ad campaign on brand equity ratings. This study treats standardization of ad elements, conceptually and theoretically, as an independent variable or communication strategy and brand equity as a dependent variable or a measure of advertising standardization effectiveness. According to past studies, there are competitive marketing communication advantages to executing standardized advertising ad campaigns. According to Mueller (1992, p. 15) one of the benefits of standardization for marketers is "building of international brand and company image". Hsieh (2002) emphasized the importance of providing "an explicit approach to measuring the degree of brand globalization in terms of brand image cohesiveness" (p.62). This study experimentally highlights strategic and executional techniques of achieving varying degrees of ad campaign standardization through the development of a uniform brand-image communication that contributes to building consumer-based brand equity.

Many scholars correlate global consumer culture with global brand image that leads to stronger brand equity. Alden, et al. (1999, p.75) suggested, "The potential contributions to brand equity that flow from associating a brand with global consumer culture have long been recognized." The importance of this statement is that visuals as an ad-element component can play an influential role to convey the global consumer culture through specific brand image and positioning. Levitt (1983) stated that consumers around the world express preference for global

products for 'superior quality and reliability'. One of the key measures of brand equity scale is based on the perception of brand trust and brand quality (Yoo, et al. 2001). Steenkamp, et al. (2003, p. 53) indicated that preference exists for "brands with global image over local competitors, even when quality and value are not objectively superior." The idea that standardization of ad symbols can trigger universal common grounds for brands has been expressed in numerous scholarly papers. Steenkamp, et al. (2003) added that building on the emergence of globally shared meanings, advertisers can "strengthen their brand's equity in an increasingly competitive marketplace".

It appears that a globally standardized ad campaign can have cognitive, affective and conative influence on consumers despite the ubiquitous and steadfast counter-arguments against standardization in the literature. Aaker (1996 p. 128) underscored prestige and credibility that is associated with global brands. It is deemed that the reputation and credibility of a brand is built on the basis of consumers' continued exposure to uniform content. Kapferer (1992, p. 16) asserted that a brand becomes credible through "endurance and repetition." The author also emphasized permanence and continuity (Kapferer, 1992 p. 33). This paper argues that to establish consistency, brand image and brand identity through time and markets, they have to be built through standardized ad campaigns. Sign of continuity can be developed through uniform identity. Identity precedes image that is decoded by consumers (Kapferer, 1992 p.37). Aaker and Joachimsthaler (2000) described global brands as "brands with a high degree of similarity across countries with respect to brand identity... look and feel (p. 306)".

Aaker (1996, p. 7) defined brand equity as "a set of assets linked to a brand's name and symbol that adds to the value provided by a product." Aaker (1996) refers to major assets for brand equity as brand name awareness, brand loyalty, perceived quality and brand associations. "Such

strong asset categories build strong brands that create value (Aaker, 1996, p.8)." In this paper, the brand equity scale (Yoo, et al., 2001) tests the standardization effects of ad elements on the basis of high-level ad effectiveness measures such as purchase intentions, loyalty, quality and trust.

This study revolves around the standardization effects of color, graphic and visual factors in an ad campaign on consumer-based brand equity. "Customer-based brand equity occurs when the consumer is aware of the brand and holds some favorable, strong and unique brand associations in memory, (Keller, 1993 p.17)." Keller (1993 p. 17) defines customer-based brand equity as "the differential effect of brand knowledge on consumer response to the marketing of the brand." Most studies, in the past, have focused on the impact of marketing content and selling approaches of an ad message on standardization as an effect. Therefore, this is a timely and practical strategic consideration to study the core role of color, visual and graphic standardization to optimize creative effectiveness of global ad campaigns in global markets. This investigation contributes to academic studies by shedding light on the conceptual and theoretical importance of color, visuals and graphics as an effective integrated ad campaign standardization framework to improve advertising effectiveness and brand equity. Equally, the proposed research design and findings provide the professionals a scientific, systematic, organized and empirical approach for optimizing global ad campaigns and as a guiding light for local and regional companies that intend to globalize their ad campaigns, products and brands.

## LITERATURE REVIEW AND THEORETICAL FRAMEWORK

In many past studies, standardization has been investigated as a dependent variable. Roth (1995) used standardization as a dependent variable and employed social, cultural and economic independent variables. Duncan and Ramaprasad (1995) named their dependent variable standardization of advertising campaigns in terms of strategy, execution and language and stated that standardization occurs mainly at the strategy level and time pressure was singled out as the most important reason for standardization.

Other researchers such as Mehta (1992) found that strategies tended to be more standardized than executions in advertising. However, this research demonstrates that advertising can be standardized, to a great extent, at the executional level by standardizing ad elements of color, visuals and graphics to build and strengthen brand equity.

Benefits of standardization were debated from the earlier times. Elinder (1965) advocated using the same copy and design for cost efficiencies. Buzzell (1968, p. 102) pinpointed the use of "ideas with universal appeal." Fatt (1965) and Roostal (1962) saw advantages in standardizing ad campaigns. Okazaki and Mueller (2008, p. 771) stated that ads from West to East appear to be standardized. Levitt (1983) theorized globalization of markets for optimization of cost and authors Zou and Cavusgil (2002) presented a Global Marketing Strategy.

The focus of the earlier research in standardization, to some extent, was on cost efficiencies and centralization of the production of ads as opposed to building brand equity, ad effectiveness and measuring the results despite the immense importance of marketing communications and brand equity concepts in the marketing literature (Aaker, 1996; Keller, 1998; Kapferer, 1992; Alden, et al. 1999). The conceptual and theoretical framework researched and applied for the deduction of

the proposed hypotheses in this dissertation are the basis for the development of the Theory of Standardization of Ad Elements as a Globalization of Ad Campaign Processes.

Other scholars addressed why and how consumers are becoming global through universal media and content (Appadurai, 1990). Nelson and Paek (2007) examined executions for global advertising strategies and found standardized copy and models. Hall (1997) suggested that the recent global phenomenon does not necessarily have a Western association and it is a global mass culture that "is dominated by the modern means of cultural production."

Yet not all the scholars were convinced that standardization works. Hannerz (1990) indicated that though consumers are exposed to standardized advertising they do not become homogenized. Some authors proposed a convergent mix of global and local approach (Robertson, 1995). De Mooij (2005) one of the most outspoken scholars against standardization believed that to effectively change attitudes, purchase intention and behavior, standardization does not work. Zandpour, et al. (1994) provided "practitioners with specific guidelines to fit the more prevalent patterns of communications in a country" (p. 59). The proponents of adaptation proposed Hofstede's five dimensions of culture (Hofstede, 1980 and De Mooij, 2005) as a basis for adaptation of ad campaigns. The proposed theory, the hypotheses, the research design and the findings in this paper demonstrate that there are specific symbolic elements in the form of color, graphics, typography and visuals that can be employed in ad campaigns in order to build and strengthen brand equity.

This scientific probe differs from the past academic and professional research for its holistic focus on color, visual and graphic ad elements as a new paradigmatic realm of study in standardization for the purpose of strengthening the globalization of ad campaigns with brand

equity as a measure of communication effectiveness for global brands. Past studies in standardization and international advertising circled around environmental and cultural values as variables (De Mooij and Hofstede, 2010; House, et al. 2004); organizational and structural causes (Zou and Volz, 2010: Zou and Cavusgil, 2002); the degrees of globalization (Mueller, 1989); the cultural differences in advertising appeals (Mueller, 1987; Okazaki, et al. 2010, Taylor, et al. 1997); convergence in advertising appeals in the East and West (Okazaki and Mueller, 2008); improvement in performance (Zou and Cavusgil, 2002); and ad effectiveness (Okazaki, et al. 2006).

Harris (1994) questioned the earlier research on standardization and stated that many emphasize whether standardization or adaptation should be used, but few examined how to standardize thus raising the question of "What do the multinationals actually standardize?" (p. 13). This question is addressed empirically, systematically and scientifically through this experimental research. Ford, et al. (2011) stated, "... the degree and circumstances under which standardized advertising executions can be employed, however, remains a topic of discussion" (p. 29). Taylor, (2010) alluded to the poor "application of strong theoretical frameworks," (p. 9) and this research again intends to address the impact of the standardization of ad elements on brand equity as a strategic and executional approach to the globalization of ad campaigns and brands through a strong advertising and marketing theoretical framework. Another important aspect of this study is that not only standardization of ad elements is operationalized, manipulated, tested, analyzed and applied to academic research and practice, but standardization is also examined in terms of the degrees of its execution on the basis of the number, type and combination of standardized ad elements in order to optimize the effectiveness of global ad campaigns and strengthen brand equity.

The importance of products benefiting from stronger brand equity as a result of the standardization of ad campaigns for "building of international brand and company image (Mueller, 1992)" and the importance of providing "an explicit approach to measuring the degrees of brand globalization in terms of brand image cohesiveness (Hsieh, 2002)" and the positive impact of such ad element standardization on brand equity (Aaker, 1996; Keller, 1998; Kapferer, 1992) leads to the proposed Theory of Standardization of Ad Elements as a Globalization of Ad Campaign Processes.

#### **Consumer-Based Brand Equity as a Dependent Variable**

Advertisers by achieving a uniform design in global ad campaigns create 'globalness' (Steenkamp, et al. 2003, p. 54) or a global look and feel for brands to add value. Steenkamp, et al. (2003. p. 60) stated that evidence supported their hypothesis that there is a causal sequence, "from perceived brand globalness to brand prestige and to perceived quality." Yoo, et al. (2001) developed and validated a multidimensional consumer-based brand equity scale that includes perceived quality as a key factor and measure (p.14). Holt, et al. (2004), argued that consumers prefer global brands on the basis of quality as a global characteristic. Aaker (1996) posited that brands have two choices to make: To be a local brand or "a global brand with the accompanying prestige and credibility (p. 128)." The objective of this experimental research is to test and compare the subjects' perception of differently standardized ad campaigns through the measure of brand equity scale.

Yip (1995) stated, "In many situations standardization can actually increase preference." This paper puts standardization to test to observe if product and brand preferences improve as a result of the manipulation of the number, type and combination of ad-element standardization, and if it leads to higher scores on brand equity ratings. In other words, testing and measuring the impact

of the degrees of standardization on brand equity ratings. Steenkamp, et al. (2003) found that "consumers' preferences for globally branded products are positively related to the degree to which they believe that these products are sold around the world." This paper examines the executional strategies to see if the standardization of ad elements as key factors in globalization of ad campaigns does achieve advertising effectiveness as measured through brand equity scale.

It is argued that global brands convey credibility. Further, as a main effect, Steenkamp, et al. (2003, p. 60) not only found that perceived globalness is positively associated with brand prestige or quality, but they also posited that there is "a direct association of PBG (perceived brand globalness) with purchase likelihood for reasons of belongingness". Ford, et al. (2011, p. 29) provided the following conclusion on the status of standardization: "In summary, evidence abounds that a standardized advertising strategy has become more feasible than it was in the past. And, in fact, it often may have become more desirable in that it can help build a global brand." The latter statement is most relevant to the core of this dissertation argument and leads the conceptual and theoretical literature review of standardization and globalization studies toward the deduction of the following proposed hypotheses for the standardization of ad elements to build, strengthen and sustain brand equity for global brands, market by market, on a global basis.

# **PROPOSED HYPOTHESES**

#### The Impact of Visual Standardization on Brand Equity

Alden, et al. (1999) examined the emergence of brand positioning strategies. The authors proposed Global Consumer Culture Positioning (GCCP), even though they did not accrue it to standardization, and stated that "meaningful percentages of advertisements employ GCCP as opposed to positioning the brand as a member of the local consumer culture" (p. 75). Standardization of an ad campaign on the basis of color, graphic and, in particular, visual ad elements contributes to Global Consumer Culture Positioning (Alden, et al. 1999) and 'globalness' theorization (Steenkamp, et al. 2003) for the very reason that it can develop a consistent global brand image. The standardization of visual ad elements including models, pack shots, mnemonics and illustrations are pivotal in developing a uniform image and building a strong brand equity, market by market, globally on the basis of brand awareness, associations, likability, perceived quality, trust, purchase intentions and brand loyalty (Aaker, 1996; Keller, 1998; and Kapferer 1992).

Park, et al. (1994) attempted to separate their studies from others by investigating "the sources of brand equity in terms of its attribute and nonattribute-based components such as brand added value (p. 286)," than merely measuring product features or brand attributes. This study will provide new techniques and approaches to optimize global brand added value through standardized visuals of products, background setting, models' look, posture, make-up and personality ad elements as a cohesive global marketing communication platform for developing a uniform cosmopolitan global brand image.

The Global Consumer Culture Positioning construct was based partly on McCracken's (1986) theory of cultural meaning implying that in a consumer society cultural meaning "moves ceaselessly from one location to another... first from the culturally constituted world to consumer goods and then from these goods to the individual consumer" (p. 71). Domzal and Kernan (1993) asserted that some products "have culturally-transcendent meanings... and that they therefore qualify for global advertising consideration" (p. 2). The global use of an integrated and standardized framework of visual content can reflect McCracken's (1986, p. 74) "transfer of meaning" concept. Such a framework can basically convey the idea that visuals can transfer meaning from one culture to another depending on how they are developed and managed and that they can be used as standardized imagery in ad campaigns. Calder and Reagan (2001, p. 67) posited, "A design simply expresses meaning. Meaning can be expressed in many ways. It can be expressed verbally through words... or it can be expressed visually through pictures and images." It is reported that subjects' reaction to pictures influences their processing of advertising information (Unnava and Burnkrant, 1991).

This experimental research intended to test the substantial influence of visuals on standardization of advertising and its critical impact on brand equity as conveyed through an ad campaign. Özsomer and Altaras (2008) postulated that in line with consumer cultural theory, "consumers actively appropriate and recontextualize the symbolic meanings encoded in marketer-generated goods to construct individual and collective identities" (p. 7). Akaka and Alden (2010) whilst elaborating on how consumers interpret meaning, pointed out that "research regarding the firm's role in studying, understanding and responding to consumer-driven brand meanings remains limited" (p. 52). The latter statement is of importance because it simply argues that it is not just the perception of the symbols from the consumers' end, but rather the companies must devise

mechanisms enabling them to deliver messages effectively across borders and cultures. This research delves into what firms do for standardization of ad campaigns to fulfill such objectives.

Holton (2000) viewed modernity as a reason for the use of globally-based brands. Global Consumer Culture theory forwarded by Alden, et al. (1999), incorporated the concept that some products become "signs of global cosmopolitanism and modernity" (p. 76). There is a shared consumer culture value referred to as cosmopolitanism and modernity and the feeling of belonging to a global market (Friedman, 1990) that is aligned with a set of symbols that indicate the membership in a global consumer culture segment (Hannerz, 1990).

Due to the prevailing and increasingly emerging global consumer culture, global transfer of meaning, the global cosmopolitanism, modernity and relatively large-scale shared global values, the standardization of ad campaigns is more than ever relevant and potent. Therefore, the standardization of visuals such as projection of global images of cosmopolitanism and lifestyles will comprise a vital and determining independent variable to be tested and evaluated in terms of its impact on consumer-based brand equity as the dependent variable. The above literature and theoretical framework point toward the conceptualization of the first hypothesis:

**Hypothesis I**: Those exposed to an ad campaign with standardized visuals versus an ad campaign with non-standardized visuals will rate the visually standardized ad campaign and the product advertised with higher brand equity mean.

## The Impact of Color Standardization on Brand Equity

In addition to standardization of visuals, advertisers use standardization of color to optimize advertising effectiveness, build and strengthen brand equity. Very few academic studies have addressed color as an ad element component to examine standardization. Michele-Anne Dauppe (2011) emphasized that graphic design has long been recognized as a relatively under-theorized domain of scientific studies (p. 489). The author positioned her paper as "how best to approach the theory / practice relationship, and explore how we might usefully position graphic design within a framework of visual culture." Dauppe (2010) further added, "Graphic design remains underdeveloped as a discipline; in comparison to its design neighbors (architecture, industrial design), its fine art neighbors, and its theory neighbors (cultural studies, media studies, visual culture) – it is barely recognized (p. 490)" This paper also argues that the concept of color, design, typography, photography and visuals have not yet been integrated more closely and comprehensively into standardization and globalization studies while conceptual and practical aspects of color in ad campaigns play a fundamental strategic and day-to-day role in advertising and marketing practice. One of the reasons for such shortcomings has been due to lack of operational definitions for color and the in-depth conceptualization of the standardization of color in ad campaigns which have not surfaced in any substantive ways in scientific advertising and marketing journals. Yet among many other scientific inquiries, Kobayashi (1981, 1987, 1990) found close association between varying colors and descriptive words as in feelings of psychological emotions. Since color can trigger and arouse substantially different types and kinds of emotions, it is imperative to standardize color in addition to visuals and graphics.

This experimental research is intended to measure the extent of the standardization of ad campaigns through the manipulation and interaction of color as an independent factor and its impact on brand equity as a dependent variable. Though the topic of standardization has had a long history, hardly any substantial research has been conducted empirically to discuss the cardinal role of color, visuals and graphics for standardization of ad campaigns, something of much importance in practice among advertisers, ad agencies, media companies and digital units.

Although some limited research has been done in theorizing the use of color, however, the extent of research on standardization of color has been scant in advertising and communication studies. The central role of color in advertising and marketing field and the sparse attention it receives in academic studies is representative of a principal disconnect between practice and the academic priorities. For that matter, even professional research on globalization of advertising has lacked the required studies on standardization of such elemental factors such as color in marketing communication. Only very few and important inter- and intra-agency white papers and documentations have addressed such grass-roots concepts in marketing communication. Considering that in the field of advertising one of the most important tasks of global advertising is standardizing color hues, saturation, Chroma, values and CMYK color processes such as cyan, magenta, yellow and black in every global market and on every communication piece, however, no solid and meaningful research can be found addressing standardization of color in advertising either academically or professionally.

Psychologists have shown interest for long in terms of the effects of color on preferences (Guilford, 1934), though studies on the effects of color in advertising and, in particular, standardization have been sparse despite the fact that it is one of the most routine and day-to-day advertising account management tasks in the field of design, communication, advertising, consumer behavior, marketing, education and online marketing. Even though the standardization of color provides promises, it should be taken up with caution because "color meanings and preferences are not consistent across cultures (Madden, et al. 2000; Moore, et al. 2005, p. 73)." Many scholars have done research supporting the use of higher value colors because they are increasingly better liked (Sharpe, 1974). Middlestadt (1989) investigated the effectiveness of products presented on blue color background versus red color background. Miller (2014) stated

that "Historically, red is the color imaginatively associated with heat and passion." Walters, et al. (1982) demonstrated that color has an effect on the degree of arousal. For example, Walters, et al. (1982) revealed that red causes excitement and blue leads to relaxation. Other scholars have also supported the different effects of color (Tom, et al. 1987).

Therefore, one can assume that if different colors are used for diverse communication messages and for discrepant markets, then the chances are that the arousal level and type of arousal effects can be a mismatch for global advertisers and it is naturally more desirable and rather critical to keep the level or type of arousal consistent in various markets by keeping colors standardized and consistent in ad campaigns globally. Color consistency from other perspectives has been a matter of much philosophical discussions in visual arts and culture. According to Hatfield (2003), most scientists support "color constancy as the ability to develop a stable representation of surface color under variations in ambient illumination."

As a follow-up to research by Bellizzi and Hite (1992) on importance of hue in color-choice decisions, Gorn, et al. (1997) stated "choosing a particular color (or colors) is a difficult and subjective task, as there is little that can be classified as solid fact." Such research results can have limited generalizability to broader advertising applications. It can be argued that an international campaign that is not standardized in background colors can instigate different types of effects that might not be the intended global communication objectives of an advertiser. Gorn, et al. (1997) through their detailed empirical study of color effects on arousal stated that there have been three streams of empirical research on color which include: First, color used in magazines to increase the impact of an ad through contrast (Schindler, 1986; Lee and Barnes, 1990); Second, the comparative use of color vs. black and white ads (Meyers-Levy, et al. 1993).

This paper provides ways and means to examine and operationally define color and measure color standardization effect on brand equity as gauged through the higher-level measures of advertising effectiveness such as brand purchase intentions and brand loyalty. For a specific corporate or brand color to be standardized, the researcher must have the checks and balances on the levels of cyan, magenta, yellow and black that is ubiquitously known as CMYK, plus the correct configuration of Chroma, hue, saturation and gradient of color in order to achieve color consistency in global ad campaigns. All the above-mentioned aspects of color not only operationally define color, but also influence the construct validity of color standardization as an independent variable. The above literature and conceptual review points to the second hypothesis in this paper.

**Hypothesis II**: Those exposed to an ad campaign with standardized color versus an ad campaign with non-standardized color will rate the color standardized ad campaign and the product advertised with higher brand equity mean.

### The Impact of Graphics Standardization on Brand Equity

Grohmann, et al. (2013), through an empirical study found that font characteristics influence brand personality perceptions. They further investigated the influence of type font color on brand personality perceptions. The authors found that "the influence of type font color on brand personality perceptions (to be) independent of the impact of the type font itself."

Carver (1970) examined the effect of a 'chunked' typography on reading rate and comprehension. In response to research that "the spatial separation of sentences into small groups of meaningfully related words facilitates free recall, rote memorization and comprehension", the authors confirmed that there was no important or statistically significant difference between the chunked format and control format. Interestingly, Moore, et al. (2005) in their conclusion recommended as "future efforts (research on) the effects of other advertisement structural characteristic, such as type size, the modality of presentation...". Research indicated that the effectiveness of the background color depends on the contrast between background color and the text color (Fernandez and Rosen, 2000). McCarthy and Mothersbaugh (2002) found that typographic legibility and clarity improves the power of reading. On the basis of these earlier findings, Moore, et al. (2005) investigated the hypothesis that "web browsers will pay greater attention to a banner ad with a high background-color / text-color contrast than to a banner ad with a low background-color / text-color contrast (p.73)."

Standardization of typography or color fonts was not again found as a subject of empirical study in many of past studies. This theoretical development will attempt to assess the impact of typographic and graphic elements as one composite component on brand equity.

It appears that research in branding, psychology and advertising has had some earlier focus on typography. None of the studies, however, looked at the standardization of typography or the indepth operationalization of the concept of color or empirically examined the holistic and the influential effects of typography such as typeface, weight, font size, kerning, leading, serif, sanserif, ascender, descender, color and art treatment on consumer responses. Further, other aspects of graphics such as the use of bleed, margin treatments that encompass numerous executions, logo positioning and spacing, logo size and logo treatment have not been subject to past empirical research. The uniformity of the graphic and typographic ad elements in detail and, in particular, in relation to visuals and color have not yet been been brought under empirical studies. Logo treatments, ad margins and typographic strategies can dramatically influence the look and feel of an ad campaign. Typographic and graphic ad elements are frequently used to

standardize ad campaigns on a global basis with strict ad elements usage guidelines. The above literature, the conceptual and theoretical framework of the standardization of graphics as an independent variable direct this paper to the third hypothesis.

**Hypothesis III**: Those exposed to an ad campaign with standardized graphics versus an ad campaign with non-standardized ad graphics will rate the graphically standardized ad campaign and the product with higher brand equity mean.

#### The Impact of the Degrees of Standardization on Brand Equity

In the literature of standardization and globalization of advertising there has been much debate about the degrees of standardization as pioneered by the lead scholars such as Mueller in this realm of studies (Mueller, 1989). However, none of the researchers attempted to systematically and empirically study the degrees of standardization operationally, and in particular, in terms of visuals, color or graphics. Due to the importance of this conceptual framework, the next hypothesis attempts to address the long standing concept of the degrees of standardization and its impact on brand equity as the levels of standardization are manipulated by the number, type and combination of ad elements. Even the earlier scholars were referring to standardization in terms of visuals or copy in the ads in their totality. For example, Elinder (1965) suggested the use of the same copy and design for cost efficiencies. Fatt (1965) and Roostal (1962) promoted the use of standardized ad campaigns without specifying verbal or visual elements and Okazaki and Mueller (2008, p. 71) found ads from West to East to be standardized. In other words, for standardization to leave its impact on brand equity and demonstrate persuasive effectiveness, adequate degrees of standardization must be assigned to an ad campaign for an effect to be observed. Visual standardization, color standardization or graphic standardization might not, on their own individually, as a single component reach the required threshold for the perception of

standardization as a treatment to actualize and leave an impact on brand equity scores. The fourth hypothesis specifically highlights the effects of the degrees of standardization in terms of the number, type and combination of ad element standardization in ad campaigns and their effects on brand equity.

**Hypothesis IV**: Those exposed to an ad campaign with increasingly more ad elements standardized in various combinations of color, visuals and / or graphics versus an ad campaign with fewer standardized ad elements, will increasingly rate brand equity with higher mean.

### The Importance of Visual Standardization as a Global Strategy

The use of visuals has always played an important role in the composition of the ad campaigns. Visuals have long been considered as the determining ad elements for standardizing ad campaigns, products, brands and promoting a global consumer culture in the form of the transfer of meaning (McCracken's (1986). Visuals can encompass and convey images with a consistent global meaning, as supported by Domzal and Kernan (1993) that some brands have culturallytranscendent meaning and that they, therefore, qualify for global advertising consideration (p. 2).

Other scholars emphasized the importance of visual meaning and imagery on a global basis. Calder and Reagan (2001, p. 67) postulated that, "A design simply expresses meaning. Meaning can be expressed in many ways. It can be expressed verbally through words... or it can be expressed visually through pictures and images." It is also reported by other scholars that reaction to pictures influences the processing of advertising information (Unnava and Burnkrant, 1991). This experimental research attempts to test if visuals do play a more important role on standardization of ad campaigns versus graphics and color as other ad elements. Due to the unique and historical importance of visuals in advertising, the following hypothesis is proposed.

**Hypothesis V**: Visual standardization moderates most positively in conjunction with either color standardization or graphic standardization in improving the brand equity ratings for the ad campaign and the product.

#### The Impact of Prior 'Globality' Cognitive and Affective Reactions on Brand Equity

Dimofte, et al. (2008) argued that the ten-item Measure of Brand Equity (MBE) developed by Yoo & Donthu (2001) falls short for not bringing under consideration the prior cognitive and affective reaction to 'globality' of brands. Because in this paper, Measure of Brand Equity (MBE) is used as the key assessment for evaluating the impact of standardization on ad campaign effectiveness, then it is considered important to examine globality as a cognitive and affective scale.

Dimofte, et al. (2008) argued that previous research (Holt, et al. 2004) used "well-known and liked global brand names (that) placed all respondents in the 'proglobals' category. As such, their results only capture half the picture..." (p. 131). As a result, the authors departed from associating global brands with perception of superior quality. They built their argument on the affective aspects of consumer predispositions and stated that globality construct does not relate to quality but rather to identification with the global consumer culture or 'the world outside' (Dimofte, 2008; Batra, et al. 2000).

In order to make sure that an important aspect of brand equity that is that of aspiration (feelings) or prior cognitive and affective reactions to 'globality' is incorporated in the conceptual and theoretical framework of this dissertation, the following hypothesis is proposed to test the moderating effect of 'globality' construct (Dimofte, 2008) on brand equity measure, Yoo & Donthu (2001). The criticism against MBE can be that global brands are shaped more by affect

and much less by cognition (Dimofte, et al. 2008) and that the quality effect is due to prevailing brand strength of big brands and not due to brand globality. For future guidance and for developing more optimized measures of advertising standardization effectiveness for building brand equity on the basis of brand trust versus aspirations, the following hypothesis is presented.

**Hypothesis VI**: Prior 'globality' cognitive and affective reactions (brand globality predisposition) of those exposed to more standardized ad campaigns moderates positively the cumulative impact of the standardization of color, visual and graphic ad elements on brand equity ratings.

# **METHODOLOGY**

Online laboratory experimental research is employed. The treatment factors in the experimental groups are standardization of color, standardization of visuals and standardization of graphics as nominal or categorical variables that are administered at three distinct ad-element component levels of manipulation through the exposure of differently standardized ad campaigns to the participants. All the experimental treatment stimuli such as color, visuals and graphics are induced at different levels to a fully non-standardized ad campaign as a benchmark experimental ad campaign group with non-standardized color, non-standardized visuals and non-standardized graphics.

For example, when color is standardized it is measured against other standardized experimental groups and also benchmarked against a fully non-standardized color ad campaign and a fully standardized ad on all ad elements. In other words, the latter ad campaign being a one-off ad run repetitively rather than an ad campaign with ad element variation.

A total of 440 subjects are selected randomly online to participate in the study. The subjects are then randomly assigned to eight experimental groups of approximately equal number of 55 each. Two of the experimental groups at the two end of the continuum of standardization are exposed once to a fully standardized ad campaign (exactly the same and identical ads repeated three times in the digital magazine), and once to the fully non-standardized ad campaign (different and nonstandardized on all the three summated ad-element components of color, visuals and graphics). These two experimental groups have the dual role as control and experimental groups simultaneously. Each of the eight experimental groups is exposed to a different ad campaign standardized on the basis of the number, type and combination of standardization that allow to test the degrees of standardization from fully non-standardized ad campaign to a fully standardized ad campaign with all the three components standardized as shown in Table 1.

The brand equity scale means for the fully standardized to the least-standardized ad campaigns are compared with the mean of other experimental groups. The mean differences in responses elicited at the three categorical levels of ad element components are compared and statistically analyzed in order to measure the degrees of the effects of the standardization and non-standardization of the three main nominal factors of color, visuals and graphics on brand equity as conveyed through eight differently standardized ad campaigns in the combined eight experimental and control groups. Once the experimental groups have been exposed to their assigned standardized ad elements, then the mean differences of the eight experimental groups are gauged (in-between group measures).

## Cause

The cause or the cumulative independent factors in this experimental research is the standardization of color, visuals and graphics as three composite components that each is the multiple items of specific ad elements within an ad campaign. The ad effectiveness measured through brand equity scale is the effect caused by the standardization of ad elements as the cause. "That which produces any simple or complex idea, we denote by the general name cause, and that which is produced, effect" (Locke, 1975).

#### Effect

In this experiment the intention is to observe what happens to brand equity when standardization is manipulated in terms of the number, type and combination of ad elements. The effect here is the statistical mean differences among the various experimental groups (between group tests).

Kerlinger and Lee (2000, p. 487) stated "as long as there is an attempt to make two groups systematically different on a dependent variable, a comparison is possible.

Thus the traditional notion that an experimental group should receive the treatment not given to a control group is a special case of the more general rule that comparison groups are necessary for the internal validity of scientific research." In both experimental and control groups, treatments are induced. However, in the case of fully standardized and non-standardized tests a dual function of control and experimental group holds in the statistical and methodological design of this proposed research.

## **Research Design**

The three nominal independent variables in our study are color standardization, visual standardization and graphic standardization. Standardization is used in the three main-effect experimental groups and in the four other experimental groups in the form of the interaction of the three types of standardization as in Table 1. A control group is used with no standardization stimuli that ensures all the ads are varied substantially in respect to color, visuals and graphics. Fully standardized group can also be considered as a control or experimental group.

The below design outlines the conceptualization and the structure of the relations among the variables of this research study. R representing randomized assignments of the participants, X as the treatment of the various standardized ad elements such as color, visuals, graphics and O as the observation or the measure of the dependent variable in each group. The X in light grey stands as a control group.

## Table 1: F Statistics for elicited consumer-based brand equity through the standardization

## of ad elements

STIMULI		MODERAT	TION	_ DEPENDENT VARIABLE
		Prior Cogn	ition and Affective disposition	Brand Equity
			<b>Globality Scale</b>	<b>MBE Scale</b>
Color Standardization				
Visual Standardization	l			
Graphics Standardizat	ion			
Color S X Visuals S				
Visuals S X Graphics	S			
Color S X Graphics S				
Color S X Graphics S	X Visuals S	5		
Control Group: No Sta	ndardization	n Treatment		
S = Standardization				
Experimental Group - Control Group: Randomized Participants Design				
R	X1	0	Experimental Group I / Color	s
R	X2	0	Experimental Group II / Visua	ls S
R	X3	0	Experimental Group III / Graj	phics S
R	X4	0	Experimental Group IV / Colo	r S x Visuals S
R	X5	0	Experimental Group V / Visua	lls S x Graphics S
R	X6	0	Experimental Group VI / Colo	r S x Graphics S
R X7	or X7	0	Experimental Group VII / Col	or S x Graphics S x Visuals S
R	X8	0	Control Group VIII / No inter	nded Standardization
S: stands for standardiza	tion of summ	ated ad elemer	nt components in each independer	t factor

The objective is to find a causal relationship by ensuring that standardization of ad elements as the cause in the form of manipulation in the number, type and combination of ad element components precede the effect that is brand equity of ad campaign and the product. Cause must relate to the effect and no alternative explanations or rival hypotheses must be found for the effect than the cause. Between-groups mean comparison design is used in this empirical study for the eight experimental statistical tests.

This research design sheds light on the various types of confounds that can interfere with the experimental research. The objective in improving internal validity and external validity is to isolate such confounding factors. This experiment investigates the standardization effects of summated groups of ad elements in each category of color, visuals and graphics that can be manipulated to leave an impact on the reactions of the respondents toward brand equity. The conceptual and theoretical framework here is that standardization or consistency of ad elements influences brand equity and values.

#### **Sample Selection and Questionnaire Procedure**

A total of 440 online interviewees were selected randomly and assigned randomly to 8 groups of approximately 55 master workers each. Amazon Mechanical Turk (AMT) is used and digital magazines are designed for each experimental group with three ads in one issue and eight differently standardized ad campaigns for all the eight experimental groups. In reality, standardized or non-standardized ads are run in different issues of magazines, newspapers and various types of media such as TV, outdoor, point of sales and in other forms. The assumption limiting the scope of this research is that the subjects are exposed to three ads within one digital magazine as the definition of a campaign which is not the case in the real world. Though on the positive side, it is not impossible to have two or three ads of the same product in the same magazine, or a number of TV commercials run within a one-hour time slot as it is very much common in online video advertising on CNN or YouTube.

The respondents are requested to go through the pages of a thin digital magazine that is produced with merely 12 pages for ease of review. The idea is to have the participants pay more attention to the ads that are the main focus of the study as opposed to the content of the magazine that is a secondary concern and is only meant to provide a proper and realistic context for the ad campaign. Then the AMT workers as online participants are invited to go through the online magazine and look at the three ads. The requester as the author of this online research instructs the workers as online research subjects that they are provided only with a section of the digital magazine for ease of the research task and for saving their time.

http://www.flipsnack.com magazine format is used that is the mirror imitation of an actual magazine as opposed to typical CNN or BBC online sites. The advantage of using this online magazine format is that because this type of digital magazine mimics exactly the real traditional magazines and that ad elements such as bleed, margin and other related ad elements can be accurately developed in the ad campaign as treatment stimulus. Further, instead of implementing the traditional classroom experimental surveys, online respondents are employed. In this case the ads are seen in real context and in a more natural setting as opposed to the artificial and forced settings of a university classroom http://www.flipsnack.com/flip-book-template/interactivemagazines/#1 The workers (subjects) are recommended to go through the pages of the magazine and review the magazine with the three ads for at least one minute. Participants can move to the survey section only after one minute is passed in order to ensure that the subjects do get the chance to notice the ads to respond appropriately to the online questions. The online program was written and coded as such that the workers could not start responding to the survey questions within the experiment until one minute is allotted to the magazine review by the Amazon workers. HITS or Human Intelligence Tasks that are the data and information elicited on AMT
have their reliability and validity limits despite the profound advantages they offer.

Comprehension questions or attention check questions or ACQs are required for reliability of AMT answers, however, Peer, et al, (2014) concluded that, "Sampling high-reputation workers can ensure high-quality data without having to resort to using ACQs, which may lead to selection bias if participants who fail ACQs are excluded post-hoc." The workers for this dissertation research were paid above average and mainly master workers were used. However, an attention check question was included in the experimental questionnaire to ensure reckless, inattentive and professionally twisted AMT respondents who are frequently online merely for financial gains and a quick buck are avoided.

One other problem with AMT, (Amazon Mechanical Turk also known as Mturk), is that because the workers are paid substantially lower than they would have been paid in a real lab or as a credit hour in a class, the attention span is lower and the participants either drop out easier in the middle of the session or do an easy and quick run of automatic ticking of the responses to get over the task quicker. It is important that the data is collected during the daytime in any specific time zone and not at a time when the workers are suffering from fatigue or intoxication at later hours of the night. To make the questionnaire more engaging and interactive it is important that the survey is basically fun and simple. A digital magazine that flips automatically by clicking the arrows on the right and left hand side of the magazine with special toned down mild flipping sound effect is simple and fun to go through. The subjects provided the answers by simply ticking the boxes on multiple-choice questions and picking out the numbers on the scale sentiment questions. The answers are then digitally and online transferred to a central SQL database custom designed for this research and transferred on to an MS Excel while the data prepared and cleaned for import into IBM SPSS Statistics program, 64-bit edition, version 23,

for the various ANOVA and MANOVA statistical analyses. To safeguard that distraction does not affect the completion of the questionnaire, it was ensured that no further links are required and the questionnaire can be completed on the same one-page IP address without any need to go on to another page that can require Internet access to other sites. However, each question is placed and answered in sequence and the subjects were not able to get back to the previous questions or the digital magazine once they have started answering the questions in order to protect the experiments reliability and validity.

Because various browsers are used such as Safari, Chrome, Internet Explorer, Mozilla, Firefox, Netscape and some others, it is very important that the app or the site devised for the questionnaire and the digital magazine comprising the ads were compatible for all these browsers and their various versions. A filter question made it clear and helpful for the workers that their browser was compatible with the digital magazine site so that the presentation of the stimuli is consistent with all the workers' computer interface and no dissimilarities occurs in the exposure of the experimental treatments that can seriously bias the research.

The criteria for selecting the workers are set in advance of the research and all efforts were made not to influence the sample selection process in any biased manner. This is usually something very tempting during virtual online research as opposed to real life lab experiments. Though the sample selection was on a random basis, however, the prior selection criteria were from the pool of college students or graduates, 20-45, equally of male and female gender and from the pool of the universe available through AMT. This latter point can again be another limitation to the research procedure. Further, since Mturk allows only US workers to answer the questions as a result of the recent federal laws and regulations, then only US workers are used for this research that can limit the study to the extent that US workers are not as much globally driven (having

more tendencies to follow Buy American sentiments) as opposed to some specific countries in the world. To address this problem, a globality interaction construct is used as a moderating measure. This is because US being the base for the headquarters of most of the global brands, the international brands are not as enticing to the Americans as opposed to countries such as UK, Portugal, China, Saudi, UAE, Qatar, Kuwait, Egypt, Iran, Philippines and the like. Ironically in such countries despite the negative political rhetoric, the love marks for global brands (American brands) are imprinted in the minds of the consumers. Therefore, it can be assumed that if this research was conducted in such countries the analysis of variance would have yielded by far much higher mean differences.

"Mturk works best for random population sampling," assert scholars in the field (Buhrmester, et al, 2011; Berinsky, et al, 2012). Internet population in use is usually more educated, younger providing a good random selection of the population. The workers were made to fulfill qualifications before the participants' selection for this research as the experimental subjects. To add to the quality of the research and to have a quicker response to the questionnaire (HITS), a higher amount was paid than the lower averages on the internet in order to improve on the reliability and validity of the experiment by grabbing and maintaining the attention and interest of the subjects. Further, the length of the experiment was managed maximum to 20 minutes or less to retain the subjects' interest and focus. AMT allows having the demographic information along the study. Mortality or dropout rates were brought under check and to a minimum level.

#### **Random Assignment**

An online, randomized and controlled laboratory experimental design was employed. The purpose of the random assignment of the subjects (workers) to eight comparative groups with variance in treatment is to ensure that control is exerted over extraneous variables for improving

external validity for better generalization of the results from the experimental condition to the broader and varied situations outside the confines of the experimental online setting. Random assignment is a very important step in order to ensure that the subjects are assigned at random and merely by chance to the eight experimental treatment and non-treatment groups.

Online research is, by default, a random assignment because Mturk population is selected on a random basis. However, must take care that the eight experimental groups that are designed are not different under any conditions by any demographic characteristics (within-group differences). For example, it is a reliability and validity problem if one group is from 16 to 25 and another from 25 to 45 years of age.

Normal distribution must persist. The treatments to be measured against the control group as a comparative unit are as if by pulling the names out of a box randomly and assigning the subjects to the various classes for testing purposes in the real lab situation if that option had been opted. The result was that the eight experimental groups were probabilistically similar in attributes and the differences between the groups can be assumed to have been merely as a result of the effects of the experimental treatments and not due to the inherent differences in the eight groups (inbetween group differences). Random assignment eliminates prevailing within-group differences as alternative causes of the observed effects that might have existed before the manipulation of the independent variables as experimental bias.

#### **Construct Validity**

Cronbach, et al. (1982, p. 78) elaborated on causal generalization by stating that experiments consist of particular units, treatments, observations and settings as local conditions that have to

be applied to the real world people, treatments, measures and settings and this concerns external validity.

Construct validity generalization that is about inferences about the operational definition of the concerned standardization factors, brand equity scale and 'globality' scale and the applications to higher order and more complex constructs in the real world is an important aspect of generalization in the experiments conducted here (Shadish, 2002). It is important that the data represent the concepts, the hypotheses and the theories related to this dissertation research.

Valid and reliable operational definitions for color, visuals and graphics as our independent variable at three distinct categorical levels and operational definitions of standardization, globality dispositions and brand equity have a major impact on this experimental research and future investigations by other scholars and in terms of its application to the broader advertising and marketing communications field.

# **CONCEPTUAL AND OPERATIONAL DEFINITIONS**

#### **Independent Measures: Summated Ad Elements for Powerful Manipulation**

To induce powerful treatments for each variable, multi-item elements have to be standardized as the sub-sets of the factors of color, visuals and graphics that are detailed below as operations.

**Color:** Color Picker elements as in Adobe and other design programs demonstrate color as a function of hue, Chroma, saturation, value, gradient; and CMYK elements such as cyan, magenta, yellow and black. If any of these ad elements are not consistent and standardized within the composite component of color variable in the various ads, then color standardization is not achieved as a stimulus even if the ad color superficially or relatively looks similar.

**Visuals:** Visuals are defined as models' individualities, hair, eye colors, postures, model attitudes, background props; product shots and the related background settings. Imageries of cosmopolitanism and modern global lifestyles and other photos or illustrations for a specific product, product category and brand positioning can be cited as examples for transferring meaning through pictorial frames, icons, symbols or mnemonics.

**Graphics:** Graphics are logo position, logo size, logo treatment, bleed and margin treatment within an ad. Typography also comprises an important graphic aspect of an ad campaign in the form of typeface, type family, font size, type weight, type kerning and type leading.

The levels of standardization and non-standardization are the range of measures for the independent variable through the three components of color, visuals and graphics. The degrees of the uniformity of the look and feel of ad campaigns are defined as the degrees of the standardization of such ad elements. The idea behind the proposed operational definitions for the

independent variables is to see if the subjects can recognize and identify consciously or unconsciously a consistent ad campaign within the framework of standardization and perceive and develop brand attitudes toward the dependent variable without being aware of standardization of ad elements as a purpose of the research. Then it was probed to find out what implies in terms of the brand equity of the ad campaign, the product and the brand.

Aaker and Joachimsthaler (2000, p. 306) referred to P&G products as global brands that are envy of brand builders, "because they seem to be global brands – that is brands with a high degree of similarity across countries with respect to brand identity, position, advertising strategy, personality, product, packaging, and look and feel." Other scholars covered economies of scale and development of worldwide identity (Jain, 1989). Calder and Reagan (2001, p. 63) elaborated on brand design, "It is possible to create an ad that simply presents the product, gives a few basic facts about it, and maybe a picture. Meaning is conveyed through such minimalist style. Meaning is attachment of an association to the product and is thus necessarily linked to branding." The authors further stated, "Meaning can be expressed in many ways. It can be expressed verbally through words. Or it can be expressed visually through pictures and images."

#### **Operational Definitions of Key Ad Elements**

The use of bleed defined as an ad without a margin or a border frame or the use of a margin is an important means of giving a consistent look to an ad. Most global campaigns usually are either bleed or have a margin as part of their global graphic design consistency. Bleed is defined as ads having no margins. Margin treatment is defined as formatting of the graphics of the margins. A margin can be thin or thick. A margin can be applied to the top or the bottom of an ad or to the sides, left and right. Or the margins on the right and left can be thinner than the margins on top and the bottom. Keeping such elements consistent in an ad campaign contributes to the

standardization of an ad campaign. Then margins can come in hundreds of different graphic looks. For the ads that have margins, the similarity of the margins is a powerful means of standardizing ad campaigns.

Logo position similarity indicates that the logo is placed on the left, right, or center bottom or even in the center of an ad. Logo treatment is defined as the design and artwork done around the logo. For example, if shadows are given, if the letters are reverse white on black, or if the logo appears on the margin, or inside the picture in reverse, or on a background panel in the pictorial frame of the ad and many other such considerations are logo treatments. Logo size similarity in relation to other ad elements within the ad is self-explanatory.

In respect to typography, the text is made standardized through similarity of: type face with serif or san serif, type family such as Gothic, Arial, Helvetica, type weight in the form of light, medium or bold, type or font size, 12 points, etc., kerning which occurs when a portion of space is removed between adjacent words or characters that makes the kerning tight or space is added in between the letters and the kerning becomes more spaced or spread out. Kerning can change the overall look of a text and consequently an ad campaign to a great extent for making it more modern, edgy, masculine, feminine, soft or harsh, cosmetic or technical or more traditional and even drab.

Leading is the vertical distance between the lines. Leading like kerning can make an ad look contemporary or old fashioned, serene or busy and contribute to the standardization of an ad campaign. The combination of type family, type face, type size, type weight, type kerning and type leading all affect the overall typography of the text and design in an ad that influences the feel and look dramatically.

Construct validity of the independent variables encompassing color, visuals and graphics and the dependent variable as brand equity of the ad campaign and the product is garnered through a clear explication of the random assignment (participants randomly assigned to eight groups of treatment and control), setting (online interface), treatment (well conceptualized variation in groups of ad elements of the ad campaign) and observation and measurement of the outcome of the research by measuring the mean differences and comparing the eight experimental groups.

The intended treatment which is variations and interactions among the color, visual and graphic factors are conceptualized and well induced with power (effective manipulation as combined adelement components) to affect the outcome by using multiple features and indicators (multi-item measures) in order to operationalize the constructs in several ways so that the treatment can be effectively perceived by the participants and accurately measured and properly assessed. By using multiple-item scales the simple definitional operations that can be threat to construct validity has been reduced (Bechtel, 1988).

As a pre-test of the experimental treatments, manipulation checks were conducted to see if the online workers do perceive the independent construct operational definitions and their variations in the experiment such as manipulation of the standardization of color, visuals and graphics. Also the subjects' perception of the ad campaign and product as a result of the treatment manipulation and impact on brand equity ratings were pre-tested.

# Dependent Measure: Brand Equity Construct to Measure Standardization of Ad Elements Effectiveness

The ten-item Measure of Brand Equity (MBE) developed by Yoo & Donthu (2001) was used as the dependent variable for this study. Brand awareness / associations with five items; perceived quality with two items and Brand loyalty with three items is the brand equity construct for this study. MBE helped to examine the effects of the standardization of color, visuals, graphics and their various interactions such as color x visuals; graphics x visuals; color x graphics; and color x visuals x graphics on cognitive, affective and conative attitudes toward the ad campaigns, products and brands.

#### Moderating / Dependent Measure: Globality as a Moderating Measure

Dimofte, et al. (2008) contended that previous research (Holt, et al. 2004) used "well-known and liked global brand names (that) placed all respondents in the 'proglobals' category. As such, their results only capture half the picture..." (p. 131). As a result, the authors departed from associating global brands with perception of superior quality. They built their argument on the affective aspects of consumer predispositions and stated that globality construct does not relate to quality but rather to identification with the global consumer culture or 'the world outside' (Dimofte, 2008; Batra, et al. 2000).

In order to make sure that the important aspect of brand equity that is that of aspiration (feelings) is included in the tests, this study uses a categorical statistical design MANOVA to investigate the moderating effect of globality construct (predispositions or prior attitudes toward global brands) and the four-item dependent variable of aspiration on Measures of Brand Equity (MBE). The criticism against MBE can be that global brands are shaped more by affect and much less by cognition (Dimofte, et al. 2008) and that the effect of quality is due to prevailing brand strength of big brands and not due to brand globality. Because in this study no international brand name is used (a fictional brand name is created) then the main criticism by Dimofte, et al (2008) does not hold and it can be eliminated by using globality construct as a moderator / dependent and it is

possible to use both MBE and globality construct to evaluate the effect of the standardization of ad elements on the two constructs of brand equity and globality.

The ten items of MBE and the fifteen items of globality construct are shown below. Ailawadi, et al. (2003) stated, "customer mind-set measures assess the awareness, attitudes, associations, attachments, and loyalties that customers have toward a brand and have been the focus of much academic research... these measures are rich in that they asses several sources of brand equity, have good diagnostic ability... (p.2)." Cobb-Walgren, et al. (1995) stressed that: "Within the marketing literature, operationalization of brand equity usually falls into two groups: those involving consumer perceptions (e.g., awareness, brand associations, perceived quality) and those involving consumer behavior (e.g., brand loyalty...)."

### **Ten-item MBE Measures:**

### **BRAND AWARENESS / ASSOCIATIONS**

I can recognize Berg among other competing brands: I am aware of Berg: Some characteristics of Berg come to my mind quickly: I can quickly recall the symbol or logo of Berg: I have difficulty in imagining Berg in my mind: (reverse scoring)

#### PERCEIVED QUALITY

The likely quality of Berg is extremely high: The likelihood that Berg would be effective is very high:

### **BRAND LOYALTY**

I consider myself to be loyal to Berg:

Berg would be my first Choice:

I will not buy other brands if Berg is available at the store: I will buy Berg as a second choice:

# **Fifteen-item Globality Construct Measures:**

# REACH

When traveling abroad, one can buy global brands:A global brand is available in most countries:People across the world are able to recognize global brands:

# ASPIRATION

Purchasing a global brand says something special about the buyer: Global brands are more exciting: Users of global brands are more self-conscious: There is no unique aura about a global brand: (REVERSE CODING)

# LOW RISK

Choosing a global brand saves time compared to choosing another brand: Global brands are safer choice than other brands: Global brands have higher quality than other brands:

# ETHICS

Global brands should be particularly concerned about the environment: The ethical behavior of a global brand is an important part of its image: Dominating the competition describes global brands:

# **STANDARDIZATION**

Global brands do not customize their products to local tastes: Global brands are basically the same everywhere:

# **TREATMENTS AND MEASURES**

To administer the various treatments as manipulation of independent variable levels, a total of three ads were placed in a digital magazine and the Internet viewers were asked to flip through a digital magazine and view the three ads in the magazine. Because the idea is not to measure the effectiveness of the Berg ads in relation to other competitive brand ads and the purpose is to reveal the mean differences in brand equity ratings as the ad campaign effect at the various levels of standardization of the Berg ad campaigns in terms of the number, type and combination of ad elements, then, only a small section of the magazine and only Berg ad campaigns with different degrees of standardization were placed in the magazine for testing purposes.

Ha (1996) tried to measure brand equity based on product's name, brand image and perceived quality and the idea was to see how badly cluttered magazines could harm brand equity by lack of recognition and recall of brand name (p.37). While Ha measured the effect of the cluttered magazine on the ads, in this dissertation the mean differences that can be the cause of the clutter or lack of cohesiveness that might have been created by non-standardized ads versus standardized ads are measured. Also a digital magazine with a few pages is used so that the magazine does not dramatically interfere with the required attention on the ads. The reason is that it is essential for the participants pay adequate attention to the ads so that they can make up their opinion on the three ads that comprise a campaign for Berg.

A total of eight experimental groups were exposed to eight degrees of standardization of ad elements in eight different ad campaigns which from one end of the standardization continuum starts from a complete non-standardized ad campaign at all the three composite levels of visuals, graphics and color and then to the other end of the standardization continuum as a completely standardized ad campaign. To explain how the experiment is designed and how it was executed in terms of the development of the various stimuli and the inducement of the treatment, first the three ads were fully non-standardized. Then the fully non-standardized ads were made standardized on the basis of the color of the ads (group I), then fully non-standardized ads were made standardized on the basis of Visuals (group II) and then again the fully non-standardized ads were made standardized on the basis of the graphics (group III). This process for creating the eight different degrees of standardization treatments continues on the non-standardized ad campaign and was made standardized on the basis of color X visuals (group IV), respectively, the next treatment was standardization of visuals X graphics (group V) followed by the standardization of color X graphics (group VI) and eventually the ads are standardized on the basis of all the ad elements of color X graphics X visuals (group VII). The latter treatment is equal to having all the three ads in the campaign exactly the same as in a one-off ad campaign repeated three times with exactly the same ads. The very original fully non-standardized ad campaign was designed simultaneously both as a control and experimental group (group VIII). In a way, the two control groups of fully standardized and fully non-standardized campaigns do act as experimental groups in their own right as the experiment is designed structurally in respect to its treatments and measures.

In all the cases, Berg Shampoo ads were used. The brand name and the product labels and packaging were treated as constants. Berg brand name, product packaging, package logo and the ads were created on the basis of the adaptation of real ads in the real world as such not to be associated too closely with any known brands, however, it was kept in mind that some subconscious and subliminal resemblance was necessary to some global brands so that the ads and the product will not be looked at as a fake and non-relevant product. The look of the label

and the packaging was made similar in many ways as compared to Head & Shoulders so that some subconscious credibility as a constant is injected in all the ad campaigns without the allpowerful brand name of Head & Shoulders so that the respondents build some preliminary level of confidence in the ad campaign. A pretest also determined which brand category and which brand name to be used for testing purposes. Some of the other product categories such as mobile phones had inherent strong global brand equity due to the nature of the product and the limited number of the competitive products and brands available. Among the various newly generated brand names, Berg was better associated with a shampoo category and projected a more neutral association with either a local or a global brand. The idea behind the pretest was to address validity and reliability issues related to our experimental research. A series of focus groups were used for pretest purposes. The pretest process is further discussed in detail.

#### **Experimental and Control Groups**

**Level I Manipulation:** With treatment one, a fully non-standardized ad campaign was shown to the participants only with the color standardized: The same reading for Chroma, hue, value, saturation and exactly the same color adjustment for CMYK in all the three ads.

#### **Figure 1: Level I Manipulation**



Level II Manipulation: With treatment two, the visual elements were standardized while the

other parts of the ad campaign remained non-standardized. The visuals include the models, the product shots and the props (background elements) that were standardized.

## Figure 2: Level II Manipulation



**Level III Manipulation:** Level three treatment included the summation of graphic ad elements such as typeface, type weight, type family, type size, kerning and leading in respect to the typography and other major graphic elements such as bleed and or margin treatment, logo size, logo position and logo treatment that were standardized holistically for inducing graphic power.

#### **Figure 3: Level III Manipulation**



# **Interactive Manipulations and Effects**

The interaction effect of all the three ad elements of color, visuals and graphics were also examined in various meaningful combinations.

**Level IV Manipulation:** At the fourth level color and visuals were standardized while all other ad elements were kept non-standardized.

# **Figure 4: Level IV Manipulation**



**Level V Manipulation:** At the fifth level visuals and graphics are standardized while other ad elements are kept non-standardized.

# **Figure 5: Level V Manipulation**



Level VI Manipulation: At the sixth level, color and graphics are made standardized and other elements are kept non-standardized.

## **Figure 6: Level VI Manipulation**



**Level VII Manipulation:** With the seventh group, color, graphics and visuals are standardized. In this case all the ads start appearing identical. Just repeat of one another. This group plays the dual role of experimental and control group.





**Level VIII Manipulation:** The eighth group is another control group that at the same time plays the role of a benchmark experimental group. All the inducements in all the other experimental groups originate and start from this stage of complete non-standardization. This is the group that gets induced with no standardization treatment at all. All the items in all the three main ad element categories of color, visuals and graphics are non-standardized.

#### **Figure 8: Level VIII Manipulation**



#### **Control Groups: The Effects of the Degrees of Standardization**

The main control group as our eighth concurrent experimental group was not given the intended experimental treatments that were meant for the main body of the research; however, two control groups highly non-standardized and highly standardized campaigns as highly "negative-positive" benchmarks were used for comparison purposes. A fully non-standardized (non-standardized on color, graphics and visuals) and a fully standardized ad campaign (standardized on color, graphics and visuals) were exposed to the participants of each group respectively. The control groups provided us a two-way benchmark from the highly positive (assuming fully standardized on all the three summated items of color, graphics and visuals) and highly non-standardized on the three main elements). In a way, the two end of the continuum of non-standardization and standardization were established as a result of the two control groups for comparison purposes of the experimental and the control groups.

The purpose is to see which of the three factors (color, graphics or visuals) or which of the combinations (color x graphics; color x visuals; graphics x visuals or; color x visuals x graphics) have more significant effects on the inadvertent or subconscious perception of the degrees of standardization as an induced treatment and as an independent variable and its consequent effects on brand equity of an ad campaign and the brand advertised. Multi-measure independent

constructs were used for color, graphics and visuals to create powerful well-perceived treatments for the antecedents to induce standardization for each ad-element category. Similarly, a multidimensional scale of consumer-based brand equity related to cognitive, affective and predictive behavioral attitudes was devised to measure the moderation effect of globality on brand equity in respect to the number, different types, combination and degrees of standardization. The subjects' attitudes were elicited through a series of 10-point questions on well-established brand globality and brand equity items incorporated in a survey conducted within a laboratory online experiment as part of the observation of the participant's responses. 10-point attitudinal questions were designed to measure respondents' sentiments and achieve higher variances on scores and ensure no neutral point is selected and the responses fall either on the positive or the negative tendencies.

#### **Construct Validity and Measures**

This experimental research follows the guidelines for avoiding threats to construct validity as described in Cook and Campbell (1979): 1) All the constructs are **explicated with operations**. This is to avoid wrong inferences on the relationship between operational definitions and the constructs. 2) To avoid incorrect inferences from confounding constructs, all the **constructs are operationally defined**. 3) **Mono-operation bias** is avoided by defining the constructs in several ways and instances. Inferences from the constructs that well fit operational definitions may fail to show the lower levels of the construct and, therefore, multi-item constructs are used. 4) It is also attempted to avoid **confounding constructs** as regards to the levels of the variables. These levels, in particular, in this experiment provide variance within each category or in-between the three categories of color, visuals and graphics. This step induces power and assists variability of the treatment and provides variation for the independent variable. This step also makes

manipulation checks more feasible as part of the various pretests of the treatment to see if the online subjects perceive the variations in the independent variable. 5) Standardized ads are usually seen from one city to another city or from one country to another and through a mix of media from TV, to radio, magazines, newspapers, billboards and online while in this experiment, the treatment involves **artificiality** of only 3 print ads in a digital magazine online.

#### **The Treatments and Related Reactive Threats**

Reactivity to the experimental situation remained a construct validity problem as much as an internal and external validity issue that can further confine and limit the statistical conclusion validity. Here the variables can be confounded with the experimental situation and the measure might not be the result of the treatment but as much the result of the particularistic situation that is referred to as reaction to experimental setting (Rosenthal and Rosnow, 1969). Rosenberg (1969) concluded that experimental subjects are apprehensive about being tested by researchers and will put their best up front so that they look competent. 6) Treatment-sensitive factorial structure problem can occur when the instrumentation variances can occur because of different treatments given to the subjects in the eight different groups and this can be much apparent if the use of different browsers by the research participants causes different effects and looks in the computer interface that can bias the experimental treatment and endanger internal and external validity. The relevant action is to do proper coding for all types of online browsers to avoid different views of the stimuli on different computers and operating systems. 7) Reactive selfreport bias is relatively easier. Subjects assigned to all eight groups knew that they were going through a substantial test and not just part of a control group having no involvement leading to boredom (Aiken and West, 1990). Fortunately, no control group boredom effect is foreseen in this case because the fully non-standardized campaign and the fully standardized campaign were

as substantial stimuli as the inducement in the other experimental groups. 8) The problem of **experimenter expectancy** stands out when the experimenter tries to induce his expectancies into play. This problem can be solved as suggested by Rosenthal (1991). No leading questions are used and the questions are not worded to lead. 9) **Resentful demoralization** can occur if there are not substantial variation of independent and dependent variables as perceived by the subjects in the experimental groups (Shapiro, 1984). Therefore, it is again very important to have powerful variations so that the participants feel they are actively involved. Substantial efforts have been made to induce power with the treatments in all the eight experimental groups. It is ensured that in the experimental and control groups there are ample variations to be observed by the eight testing groups.

# PRETESTING OF PRODUCT CATEGORIES AND BRANDS

#### **Product Category Pretest**

In order to ensure neutral brands are used, a pretest of product categories and brands were undertaken on a qualitative focus group basis. The product categories that were tested included:

- 1. Automobiles
- 2. Fashion products
- 3. Body wash
- 4. Cereals, and
- 5. Mobile phones

The purpose of the product category pretest was to ensure that a neutral product category that least influences the brand equity of the campaign, product and brand is selected for the experimental research in order to avoid internal validity issues and prior dispositional product concept, product category or brand awareness bias.

Through a series of in-depth focus groups, the following categories were dropped for the following reasons:

#### Automobiles:

This category was figured out from the very start as a global brand. Cars were basically considered to be big multinational companies and, therefore, the brand surely is a global (BMW) or local brand (General Motors). The product almost dominates the ad as opposed to ad elements which are the focus of the study.

#### **Fashion Products:**

Since fashion does not carry a product packaging it was found immediately very difficult to

execute the tests. Most fashion ads hardly have body copy or headline and the visuals are all powerful and over-dominating compared to color or graphics. It was found also too sharply skewed in terms of fashion gender dichotomy.

#### **Mobile Phones:**

The focus group participants, during mobile phones ad reviews, had I-phone, Samsung, HTC, LG or Nokia in mind and all of them came through as global brands outright when sample ads shown to them. The unknown brands did not work well and were discarded as low-end, fake or some cheap Far Eastern product. Mobiles were found extremely brand driven and again they are not packaged driven. Mobiles are product driven because the products are not shown with their packaging in ads.

#### **Cereals:**

With so many sub-categories and varying consumer demographics and because of their busy and non-descriptive packaging was found difficult for testing purposes.

#### **Shampoos:**

The hair and body wash category stood out as the ideal candidate in the various pretest focus groups for the purpose of selecting a product category. It was possible to have a definitive product package in the ad. Shampoo category was found well suited for both gender. For being a relatively low interest product compared to a car or a mobile, it did not dominate the ad elements in the ad campaign. It seemed it was among a few product categories that one could present an unknown brand name and still pretend the product and the brand name is global.

### **Brand Pretest**

Once the neutral and the least influencing category is selected, then a number of brand names are

tested within this selected product category of shampoos. For example, if shampoos are selected as a category, as it is the case in this dissertation, then the following hypothetical brand names were tested to investigate which brand is most neutral (as a constant for the experiment) and having least influence on the perception of brand equity for the campaign, product and brand:

1. Sun Silk

2. Head & Shoulders

3. SunFresh

4. Garnier

5. HairFresh

6. Berg

If the product category selected were mobile phones, then hypothetically the following brands would have been tested:

1. Nokia

2. Cellephony

3. Samsung

- 4. VaVa Mobile
- 5. Blackberry

6. Mobili

A combination of existing and non-existent fictional brand names in equal numbers were used for the pretesting of the brand names to be used for this experimental research. SunFresh, HairFresh and Berg in shampoo category and Mobili, VaVa Mobile and Cellephony in mobile category are non-existent brand names as examples. The selected brand in the opted product category as the most neutral item was used for the main experiments.

HairFresh and SunFresh go with Dandruff shampoo and sound nearly like existing and nonfictional shampoos and Berg as the third to sound German and trustworthy and reliable. Cellephony as a parallel to telephony and cellphone, VaVa Mobile as a vavavoom sort of a mobile and Mobili as connoting mobility and Mobile.

The qualitative focus group pre-test research results revealed that Berg as a hypothetical brand name and shampoos as a product category was found the most relevant and appropriate for this experimental research. The package and the label design as drivers of brand equity are constant in all the focus group tests.

The purpose of using a more familiar look and feel of Head and Shoulders has to do with the idea of building some levels of brand strength, equity and trust as a constant in all the ads in order to avoid a fully dismissive response toward the brand due to the complete unfamiliarity of the product, brand and package. This relative subconscious familiarity of the layout, the product and the label contributes to having the respondents engaged with the product and the survey, however, it will not bias the research since the package design look and feel is kept constant in the ad campaigns in all the experimental groups. At the same time, to fend off the influence of brand strength of a well-known and trustworthy brand such as Head & Shoulders, a neutral brand such as Berg was chosen which came very positively throughout the qualitative pretest. It was attempted to use a neutral product category and a neutral brand name through a pretest so that the stimuli will not bias the brand equity measure of the ad campaign or the brand equity of the product. The pre-test indicated that the shampoo category as a packaged goods product group, as referred to more often in Europe, as Fast Moving Consumer Goods (FMCG) is considered less of

a global brand automatically as compared to other categories such as mobile. Further, the mobile category is so globalized with brands such as Apple's iPhone, Samsung, LG, HTC, Huawei and others that either you use a well-known brand that will be considered a global brand or a non-globally perceived brand will have no chance at all to provide adequate power for experimental inducement as a viable treatment.

On the basis of the pretesting of the strategic product category and brand name, a shampoo category was considered that is a very cluttered product category with many brands yet many global markets still have their own local shampoo brands even if they do not have their local mobile device brands. Compared to all other brand categories, shampoo was placed on a more neutral ground and the name Berg as well neither projected a global brand nor a local brand. As a follow-up to the qualitative outcome of the pretest, Berg Shampoo was considered for the experimental research.

### **Pilot Test of Treatments**

A pilot test of the standardization treatments was conducted to ensure that the participants can perceive the inducements as the antecedents and that they can respond to the questions properly and that the digital magazine can be viewed without any technical or Internet glitches.

# STATISTICAL METHODS

A series of in-between groups, analysis of variance tests (Nolan and Heinzen, 2008) were conducted. One-way ANOVA tests were employed to measure the effects of various levels of standardization as in color, visual and graphic ad elements as independent factors on the global brand equity scale of ad campaigns and brands as the dependent variable. The mean differences were compared for brand equity as a result of the differently standardized ad campaigns to measure the effectiveness of the ad campaigns in all the eight groups. In this case, there is one independent variable or factor at three levels and one dependent variable subjected to singlefactor analysis of variance at three levels of standardization. Various one-way ANOVA tests were conducted for hypothesis testing.

The independent variable in this case has a few levels and is nominal while the dependent variable is normally distributed and is a ratio measure or a scale. One-way ANOVA is deemed the appropriate test and it closely follows the statistical methodology and design of the experimental study by Gorn, et al. (1997) measuring the effect of categorical independent variables of Chroma, value and saturation on ad and brand attitude. In this experimental study, the independent categorical factors of color, visuals and graphics are used. This research also follows Gorn, et al. (1997) experimental design in terms of combining the independent factors and measuring the effects on the dependent variable. A Multivariate Analysis of Variance (MANOVA) statistical design is used to test the moderating effect of the prior cognitive and affective reactions (as perception of globality) on brand equity. Brand equity and globality are tested as two dependents through MANOVA. SPSS V 23 was used for the statistical analysis of this experimental research.

# FINDINGS

The tests of the six hypotheses are presented below. Analysis of Variance (One-way ANOVA) and Multivariate Analysis of Variance (MANOVA) are used for hypothesis testing.

### Setting the Groundwork for Statistical Design and Analysis

An analysis of variance, one-way ANOVA showed that the effect of the standardization of either color, visuals or graphics as a one-component ad-element variable, individually, on its own, was not statistically significant on the mean difference of brand equity as administered on a non-standardized ad campaign. From a conceptual and theoretical point of view the findings can make sense for this proposed statistical methodology and design. It is not just the standardization of mere colors, visuals or graphics, on its own and individually, that can produce a statistically significant mean difference in the measure of the dependent variable in different groups. The research revealed that it is the integration, the interplay and the standardization of numerous ad-element components that kick start rendering a standardized look and feel to an ad campaign.

A word of caution is that with this online research design, the ad elements might not have allpowerfully come through and for that reason the power of the various treatments might have been weaker than it would have been through a traditional research and media such as a real magazine in a laboratory or field setting. To overcome such experimental problems, prior to conducting the online research, special website codes were written to ensure that the Amazon master workers (research subjects) would not have been able to respond through mobile phone because the ads would have been too small and the effect of the ad elements would have been too minimized substantially for being noticed. For the computer interface, maximum size and space was provided online for the computer screens and adapted to most browsers for the purposes of reviewing the digital magazine and the ads. Although the research was done digitally, however, the spirit of the research was within the traditional advertising print in a traditional medium as in a magazine even though presented in a digital format that can be the cause for some contamination of the experimental treatment.

The analysis of variance provided the opportunity of measuring the effects of the standardization of color, visual and graphic ad elements and their impact on ad campaigns and brand equity. This paper presents, for the first time, an innovative conceptual, theoretical and practical research approach toward studying standardization and globalization of ad campaigns and brand equity within a new communication paradigm and a new domain of study with focus on standardization as an independent variable that can address many of the unanswered standardization questions in the academic realm to this date: How to standardize or globalize ad campaigns; how to optimize global campaigns and; how to measure the effectiveness of the degrees of standardization in ad campaigns for building and strengthening brand equity for global brands. This disruptive methodological and statistical research design on standardization of ad campaigns provides a novel means and ways of measuring and optimizing ad campaign equity and brand equity through the manipulation of the type, combination and number of ad elements comprising the degrees of standardization.

#### **Effects of Visuals Standardization on Brand Equity**

Those exposed to ad campaigns carrying only standardization of visuals did not rate the ad campaign and the product with statistically significant higher brand equity ratings. Statistical significance was not detected in the standardization of either color or graphics, on their own merit, individually. However, keeping color standardized while keeping graphics non-standardized as a constant, then standardization of visuals caused the brand equity mean to

increase. An analysis of variance showed that the effect of visual standardization was significant and increased brand equity mean (Rating scale: F(2,162) = 15.040, P < 0.01, Eta Squared = .157, means = Color Standardization: 4.2, Color & Visual Standardization: 5.3 and No Standardization: 4.5. Eta Squared comparatively measured the effect size of the ad campaign with color standardization in conjunction with visual standardization vs. the ad campaign with color standardization only and versus the ad campaign with no standardization at all. It appears that visuals can be an important vehicle for delivering cognitive messages such as product information on features and attributes. Visuals also play an important role in transferring and translating aspirational and emotional messages in terms of cosmopolitanism, modernism, love, passion and lifestyle that are the hallmark of consumer globalism and globalization of ad campaigns, brands and products.

### **Table 2: Hypothesis Testing I**

Brand Equity Groups 1 & 4 & 0					
	N	Mean	Std. Deviation		
Group I / Color S	55	4.1909	1.02853		
Group IV / Color S x Visuals S	55	5.3291	1.23133		
VIII / No intended Standardization	55	4.4782	1.12673		
Total	165	4.6661	1.22497		

Prand Equity Crouns 1 8 4 8 9

### Table 3: Hypothesis Testing I

ANOVA

Brand Equity Groups 1 & 4 & 8					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	38.537	2	19.269	15.040	.000
Within Groups	207.553	162	1.281		
Total	246.090	164			

# Table 4: Hypothesis Testing I

#### Multiple Comparisons

Tukey HSD					
(I) Croup	(I) Croup	Mean Difference (I- I)	Std Error	Sia	
(i) Group	() Group		Stat Error	Jig.	
Group I / Color S	Group IV / Color S x Visuals S	-1.13818*	.21584	.000	
	VIII / No intended Standardization	28727	.21584	.380	
Group IV / Color	Group I / Color S	1.13818	.21584	.000	
S x Visuals S	VIII / No intended Standardization	.85091 <sup>°</sup>	.21584	.000	
VIII / No intended Standardization	Group I / Color S	.28727	.21584	.380	
	Group IV / Color S x Visuals S	85091 <sup>*</sup>	.21584	.000	

Dependent Variable: Brand Equity Groups 1 & 4 & 8

Again, as further statistical analysis will show, visuals as in the case of color or graphics, on their own will not create adequate effect on standardization for the very reason of not reaching the impact threshold. It is not until the visuals and color, or visuals and graphics are combined before any substantial changes are effected in the campaign effectiveness and for the brand equity mean difference to be statistically significant.

The graph below shows how visual standardization when added to color standardization, then the combined standardization of color and visuals increases the brand equity ratings.

### Figure 9: Hypothesis Testing I



Hypothesis I, was supported with the precondition that visual standardization has to be combined with color standardization as a constant. As the graph above indicates, color standardization on its own does not demonstrate any impact on brand equity mean unless it is combined with other levels of standardization such as visuals in this case to produce a statistically significant effect.

To further test the impact of visual standardization, in the next experiment, the graphic component encompassing all the graphics was kept standardized as a constant to see the impact of visual standardization on brand equity mean. When graphics standardization was kept constant and visual standardization was added significant difference was found in brand equity mean. Keeping graphics standardization constant while visual standardization is manipulated, an analysis of variance was run and the results showed, as also indicated in the graph below, that the mean difference of visual standardization was significant when combined with the standardization of graphics (Rating scale: F(2,162) = 20.085, P < 0.01, Eta Squared = .199,

means = Graphics Standardization: 4.4, Visuals & Graphics Standardization: 5.7 and No Standardization 4.5. The combination of graphics standardization and visuals standardization demonstrated the highest brand equity mean and the largest effect size. Hypothesis I is supported with a second One-way ANOVA hypothesis test.

# Table 5: Hypothesis Testing I

Brand Equity H2 Groups 3 & 5 & 8					
	N	Mean	Std. Deviation	Std. Error	
Group III / Graphics S	55	4.4418	1.28246	.17293	
Group V / Visuals S x Graphics S	55	5.7309	1.22940	.16577	
VIII / No intended Standardization	55	4.4782	1.12673	.15193	
Total	165	4.8836	1.34854	.10498	

# Table 6: Hypothesis Testing I

ANOVA

Brand Equity n2 Groups 5 & 5 & 6					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	59.261	2	29.630	20.085	.000
Within Groups	238.985	162	1.475		
Total	298.246	164			

Brand Equity H2 Groups 3 & 5 & 8

# Table 7: Hypothesis Testing I

Dependent Variable: Brand Equity H2 Groups 3 & 5 & 8 Tukey HSD					
		Mean Difference (I-			
(I) Group	(J) Group	J)	Std. Error	Sig.	
Group III / Graphics S	Group V / Visuals S x Graphics S	-1.28909*	.23161	.000	
	VIII / No intended Standardization	03636	.23161	.987	
Group V / Visuals S x Graphics S	Group III / Graphics S	$1.28909^{*}$	.23161	.000	
	VIII / No intended Standardization	1.25273 <sup>*</sup>	.23161	.000	
VIII / No intended Standardization	Group III / Graphics S	.03636	.23161	.987	
	Group V / Visuals S x Graphics S	-1.25273 <sup>*</sup>	.23161	.000	

#### **Multiple Comparisons**

\*. The mean difference is significant at the 0.05 level.

As noted above, hypothesis I was again tested, however, this time by keeping graphics standardization and color non-standardization as constants in order to see the effect of visuals standardization (visuals is used as a plural noun at times to indicate a set of visual ad elements in an ad instead of an adjective as in visual ad elements) on ad campaign and brand equity mean. It was demonstrated that those exposed to an ad campaign with standardized visuals versus an ad campaign with non-standardized visuals will rate the visually standardized ad campaign and the product advertised with higher brand equity mean. Therefore, hypothesis I was supported with two experiments and two ANOVA analyses.

Figure 10: Hypothesis Testing I



### Effects of Color Standardization on Brand Equity

In order to test hypothesis II, color standardization is administered as a treatment while the visuals are kept standardized and the graphics are held non-standardized both as constant factors. Those exposed to ad campaigns containing combined standardized colors and standardized visuals reported higher values of brand equity for the ad campaigns and the product advertised as opposed to ad campaigns carrying non-standardized color or no standardization at all. The analysis of variance showed that the effect of color standardization was statistically significant, (Rating scale: F(2,162) = 11.224, P < 0.01, Eta Squared .122, means = Visual Standardization: 4.3, Color & Visual Standardization: 5.3 and No Intended Standardization 4.5. Hypothesis II was supported.
## Table 8: Hypothesis Testing II

Brand Equity H2 Gr	oups 2 & 4	& 8	

	N	Mean	Std. Deviation	Std. Error
Group II / Visuals S	55	4.3291	1.22182	.16475
Group IV / Color S x Visuals S	55	5.3291	1.23133	.16603
VIII / No intended Standardization	55	4.4782	1.12673	.15193
Total	165	4.7121	1.26649	.09860

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## Table 9: Hypothesis Testing II

Brand Equity H2 Groups 2 & 4 & 8					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	32.015	2	16.008	11.224	.000
Within Groups	231.041	162	1.426		
Total	263.056	164			

ANOVA

## Table 10: Hypothesis Testing II

### **Multiple Comparisons**

Dependent Variable: Brand Equity H2 Groups 2 & 4 & 8 Tukey HSD

(h) C	(h) C	Mean Difference (I-	Std Freeze	Sim
(I) Group	(J) Group	J)	Sta. Error	Sig.
Group II / Visuals S	Group IV / Color S x Visuals S	-1.00000*	.22773	.000
	VIII / No intended Standardization	14909	.22773	.790
Group IV / Color S x Visuals S	Group II / Visuals S	$1.00000^{*}$	.22773	.000
	VIII / No intended Standardization	.85091*	.22773	.001
VIII / No intended	Group II / Visuals S	.14909	.22773	.790
Standardization	Group IV / Color S x Visuals S	85091*	.22773	.001

\*. The mean difference is significant at the 0.05 level.

The graph below shows how color standardization when added to visual standardization increases the mean of brand equity.

Figure 11: Hypothesis Testing II



However, again, the very fact that there was no significant effect of standardization of color on its own as in the case of visuals standardization individually, it does not mean that color or visuals are not important factors in standardization. The findings merely indicate that standardization of color on its own merit if not combined with the standardization of other specific ad elements such as visuals or graphics, it will not produce adequate required impact to achieve a statistically significant difference and sizable effect.

Statistical analysis confirmed that combined standardization of color with an existing standardization of visuals or in combination with both visuals and graphics as constants displayed statistically significant difference in brand equity mean. Then color was found to play a pivotal role in respect to the standardization of an integrated global communication for ad campaigns and brands to leave an impact on improving the brand equity mean.

The findings above supported hypothesis II that those exposed to an ad campaign with standardized color versus an ad campaign with non-standardized color will rate the color standardized ad campaign and the product advertised with higher brand equity mean.

A pre-condition is required to support this hypothesis. Color standardization must be used in combination with visual standardization or in combination with both graphic standardization and visual standardization for optimizing campaign and brand equity. This pre-condition is meaningful because just for a few ads in a campaign having the same color do not render them consistent, uniform, standardized and global in look and feel and there must be something beyond similar color to build an ad campaign. For standardization to take shape and leave an impact, a series of ad elements must be standardized (higher degrees of standardization and with specific types and combination of ad elements) for the effect to be realized and higher scores of brand equity to be elicited.

### **Effects of Graphics Standardization on Brand Equity**

An analysis of variance showed that the effect of graphics standardization was statistically significant on brand equity when graphics standardization was induced and the color was kept constant. (Rating scale: F(2,162) = 8.050, P < 0.01, Eta Squared = .090, means = Color Standardization: 4.2, Color & Graphics Standardization: 5.1 and No Standardization 4.5. Hypothesis III was supported that those exposed to an ad campaign with standardized graphics versus an ad campaign with non-standardized ad graphics will rate the graphically standardized ad campaign and the product with higher brand equity mean.

## Table 11: Hypothesis Testing III

Brand Equity H1 Groups 1 & 6 & 8						
	N	Mean	Std. Deviation	Std. Error		
Group I / Color S	55	4.1909	1.02853	.13869		
Group VI / Color S x Graphics S	55	5.1418	1.59626	.21524		
VIII / No intended Standardization	55	4.4782	1.12673	.15193		
Total	165	4.6036	1.32848	.10342		

# Table 12: Hypothesis Testing III

#### ANOVA

Brand Equity H1 Groups 1 & 6 & 8

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	26.165	2	13.082	8.050	.000
Within Groups	263.273	162	1.625		
Total	289.438	164			

## Table 13: Hypothesis Testing III

#### **Multiple Comparisons**

Dependent Variable: Brand Equity H1 Groups 1 & 6 & 8 Tukey HSD

,				
(I) Group	(J) Group	Mean Difference (I- J)	Std. Error	Sig.
Group I / Color S	Group VI / Color S x Graphics S	95091*	.24310	.000
	VIII / No intended Standardization	28727	.24310	.466
Group VI / Color	Group I / Color S	.95091 <sup>*</sup>	.24310	.000
S x Graphics S	VIII / No intended Standardization	.66364*	.24310	.019
VIII / No	Group I / Color S	.28727	.24310	.466
Standardization	Group VI / Color S x Graphics S	66364*	.24310	.019

\*. The mean difference is significant at the 0.05 level.

Figure 12: Hypothesis Testing III



Another test is conducted toward supporting hypothesis III, and this time by manipulating graphics standardization and keeping visuals standardization constant while keeping color non-standardized. Analysis of variance showed that the effect of graphics standardization was significant and caused changes in the mean of brand equity (Rating scale: F(2,162) = 22.885, P < 0.01, Eta Squared = .220, means = Visuals Standardization: 4.3, Visuals & Graphics Standardization: 5.7 and No Standardization 4.5. Hypothesis III was again supported and the effect size in this case is substantial.

Table 14: Hypothesis Testi	ng II	L
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Mean of Brand Equity Groups 2 & 5 & 8					
	N	Mean	Std. Deviation	Std. Error	
Group II / Visuals S	55	4.3291	1.22182	.16475	
Group V / Visuals S x Graphics S	55	5.7309	1.22940	.16577	
VIII / No intended Standardization	55	4.4782	1.12673	.15193	
Total	165	4.8461	1.34343	.10459	

## Table 15: Hypothesis Testing III

### ANOVA

Mean of Brand	Equity Gr	oups 2 &	5 & 8
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	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	65.205	2	32.603	22.885	.000
Within Groups	230.785	162	1.425		
Total	295.990	164			

## Table 16: Hypothesis Testing III

#### **Multiple Comparisons**

Dependent Variable: Mean of Brand Equity Groups 2 & 5 & 8 Tukey HSD

•				
		Mean Difference (I-		Ċ
(I) Group	(J) Group	J)	Std. Error	Sig.
Group II / Visuals S	Group V / Visuals S x Graphics S	-1.40182*	.22760	.000
	VIII / No intended Standardization	14909	.22760	.790
Group V / Visuals S x Graphics S	Group II / Visuals S	1.40182*	.22760	.000
	VIII / No intended Standardization	1.25273 <sup>*</sup>	.22760	.000
VIII / No intended	Group II / Visuals S	.14909	.22760	.790
Standardization	Group V / Visuals S x Graphics S	-1.25273*	.22760	.000

\*. The mean difference is significant at the 0.05 level.

Figure 13: Hypothesis Testing III



### Effects of the Degrees of Standardization on Brand Equity

Hypothesis IV states that those exposed to an ad campaign with increasingly more ad elements standardized in various combinations of color, visuals and / or graphics versus an ad campaign with fewer standardized ad elements, will increasingly rate brand equity with higher mean.

This hypothesis is tested by adding more ad elements to the ad campaign to see if changes can be observed in the elicited brand equity scale results. To test this hypothesis, the ad campaign was standardized with visuals standardization (visuals s) in one group, in another group color standardization was added to standardized visuals (visuals s x color s) and in the third group standardized graphics were added to the standardized visuals and standardized color (visuals s x color s x graphics s). An analysis of variance showed that the effect of visuals standardization in combination with color standardization and further graphics standardization was significant as

compared to standardizing visuals only or no standardization at all. (Rating scale: F(2,162) = 19.840, P < 0.01, Eta Squared = .197, means = Visual Standardization: 4.3, Visuals & color Standardization: 5.3 and Visuals & Graphics & Color 5.8. Tukey HSD Post Hoc tests as conducted in most of the hypotheses testing showed that analysis of variance was statistically significant to produce higher brand equity mean once color standardization was added to the standardized visuals (visuals s x color s), or color standardization added to visual and graphic standardization combined (color s x visuals s x graphics s) as compared to the first group (color s). Therefore, hypothesis IV was supported. However, analysis of variance did not show the effect to be statistically significant between (visuals s x color s) group mean and that of (visuals s x color s x graphics s).

Table	<b>17:</b>	Нуро	thesis	Testing	IV
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Brand Equity Groups 2 & 4 & 7							
	N	Mean	Std. Deviation	Std. Error			
Group II / Visuals S	55	4.3291	1.22182	.16475			
Group IV / Color S x Visuals S	55	5.3291	1.23133	.16603			
Group VII / Color S x Graphics S x Visuals S	55	5.7709	1.23658	.16674			
Total	165	5.1430	1.36392	.10618			

Brand Equity Groups 2 & 4 & 7

### **Table 18: Hypothesis Testing IV**

ANOVA
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Brand	Equity	Groups	2	& 4	4	&	7		
			-			- £			-

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	60.024	2	30.012	19.840	.000
Within Groups	245.060	162	1.513		
Total	305.084	164			

## Table 19: Hypothesis Testing IV

### Multiple Comparisons

Dependent Variable: Brand Equity Groups 2 & 4 & 7 Tukey HSD						
		Mean Difference (I-				
(I) Group	(J) Group	J)	Std. Error	Sig.		
Group II / Visuals S	Group IV / Color S x Visuals S	-1.00000*	.23454	.000		
	Group VII / Color S x Graphics S x Visuals S	-1.44182*	.23454	.000		
Group IV / Color S x Visuals S	Group II / Visuals S	$1.00000^{*}$	.23454	.000		
	Group VII / Color S x Graphics S x Visuals S	44182	.23454	.147		
Group VII / Color S x Graphics S x	Group II / Visuals S	1.44182*	.23454	.000		
Visuals S	Group IV / Color S x Visuals S	.44182	.23454	.147		

\*. The mean difference is significant at the 0.05 level.

## Figure 14: Hypothesis Testing IV



To test hypothesis IV, further analysis of variance was conducted with other ad element groups. The second test started with standardization of color, then additional standardization of visuals and followed by adding further standardization of graphics. An analysis of variance showed that the effect of combined standardized color (color s) and standardized visuals (visuals s x color s) with that of combined standardized color, standardized graphics and standardized visuals (visuals s x color s x graphics s) were both statistically significant when compared to an ad campaign standardized only with the visuals (visuals s). (Rating scale: F(2,162) = 26.8, P < 0.01, Eta Squared = .248, means = Color Standardization: 4.2, Color & Visuals Standardization: 5.3 and Color & Graphics & Visuals 5.8. Tukey HSD Post Hoc tests as showed that analysis of variance was statistically significant to produce higher brand equity mean once visuals standardization was added to the standardized color; or standardized visuals added to standardized graphics and standardized color as compared to the first group (color s). Again hypothesis IV was supported. However, analysis of variance did not show the effect to be statistically significant between (visuals s x color s) and that (visuals s x color s x graphics s).

Brand Equity Groups 1 & 4 & 7								
	Z	Mean	Std. Deviation	Std. Error				
Group I / Color S	55	4.1909	1.02853	.13869				
Group IV / Color S x Visuals S	55	5.3291	1.23133	.16603				
Group VII / Color S x Graphics S x Visuals S	55	5.7709	1.23658	.16674				
Total	165	5.0970	1.34043	.10435				

## Table 21: Hypothesis Testing IV

ANOVA

Brand	Equity	Groups	1	&	4	&	7	
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	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	73.096	2	36.548	26.722	.000
Within Groups	221.572	162	1.368		
Total	294.668	164			

## Table 22: Hypothesis Testing IV

### **Multiple Comparisons**

Dependent Variable: Brand Equity Groups 1 & 4 & 7 Tukey HSD

		Mean Difference (I-		
(I) Group	(J) Group	J)	Std. Error	Sig.
Group I / Color S	Group IV / Color S x Visuals S	-1.13818*	.22301	.000
	Group VII / Color S x Graphics S x Visuals S	-1.58000*	.22301	.000
Group IV / Color	Group I / Color S	$1.13818^{*}$	.22301	.000
S x Visuals S	Group VII / Color S x Graphics S x Visuals S	44182	.22301	.120
Group VII / Color S x Graphics S x Visuals S	Group I / Color S	$1.58000^{*}$	.22301	.000
	Group IV / Color S x Visuals S	.44182	.22301	.120

\*. The mean difference is significant at the 0.05 level.

Figure 15: Hypothesis Testing IV



The third test for hypotheses IV started with standardization of graphics, then followed with adding standardization of visuals and followed by adding further standardization of color. An analysis of variance showed that the effect of combined standardized graphics and standardized visuals (visuals s x graphics s) and combined standardized color x standardized graphics x standardized visuals (visuals s x color s x graphics s) were both statistically significant as compared to standardizing only the graphics (graphics s). (Rating scale: F(2,162) = 20.131, P < 0.01, Eta Squared = .199, means = Graphics Standardization: 4.4, Graphics & Visuals Standardization: 5.7 and Color & Graphics & Visuals 5.8. Tukey HSD Post Hoc tests showed that the effect was significant and provided higher brand equity mean once graphics standardized visuals and color as compared to the first group of merely standardized graphics. Hypothesis IV

was again supported with this third experiment and ANOVA test. However, analysis of variance did not show the effect to be significant between standardized visuals and standardized graphics group (visuals s x graphics s) and that of standardized color, standardized visuals and standardized graphics group (visuals s x color s x graphics s).

What can be inferred here is that visuals and graphics can have significant impact on standardization and once the summated measure of these two ad elements are executed in an ad campaign, then color standardization at that point can have less impact on brand equity and as it can be seen in the graph below the line flattens indicating softening of effect as a result of further standardization.

### Table 23: Hypothesis Testing IV

Mean of Brand Equity Groups 3 & 5 & 7

	N	Mean	Std. Deviation	Std. Error
Group III / Graphics S	55	4.4418	1.28246	.17293
Group V / Visuals S x Graphics S	55	5.7309	1.22940	.16577
Group VII / Color S x Graphics S x Visuals S	55	5.7709	1.23658	.16674
Total	165	5.3145	1.38785	.10804

## Table 24: Hypothesis Testing IV

ANOVA

		~	
Mean of Brand	Equity Groups	3	& 5 & 7

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	62.880	2	31.440	20.131	.000
Within Groups	253.005	162	1.562		
Total	315.885	164			

## Table 25: Hypothesis Testing IV

Multi	pie	Com	parisoi	ıs	

Тикеу НЗД				
(I) Group	(I) Group	Mean Difference (I- J)	Std. Error	Sig.
Group III / Graphics S	Group V / Visuals S x Graphics S	-1.28909*	.23831	.000
	Group VII / Color S x Graphics S x Visuals S	-1.32909*	.23831	.000
Group V / Visuals S x	Group III / Graphics S	$1.28909^{*}$	.23831	.000
Graphics S	Group VII / Color S x Graphics S x Visuals S	04000	.23831	.985
Group VII / Color S x Graphics S x Visuals S	Group III / Graphics S	$1.32909^{*}$	.23831	.000
	Group V / Visuals S x Graphics S	.04000	.23831	.985

Dependent Variable: Mean of Brand Equity Groups 3 & 5 & 7 Tukey HSD

\*. The mean difference is significant at the 0.05 level.

Figure 16: Hypothesis Testing IV



To further test hypothesis IV, graphics are standardized again, however, this time standardization of color is added first to the standardized graphic ads and then standardized visuals added. Analysis of variance showed significant effect in this case (Rating scale: F(2,162) = 12.747, P < 0.01, Eta Squared = .136, means = Graphics Standardization: 4.4, Graphics & Color Standardization: 5.1 and Color & Graphics & Visuals 5.8. Tukey HSD Post Hoc tests showed that the effect was significant when color standardization was added to graphics standardization and higher brand equity ratings were elicited.

## Table 26: Hypothesis Testing IV

Mean of Brand Equity Groups 3 & 6 & 7

	N	Mean	Std. Deviation	Std. Error
Group III / Graphics S	55	4.4418	1.28246	.17293
Group VI / Color S x Graphics S	55	5.1418	1.59626	.21524
Group VII / Color S x Graphics S x Visuals S	5 5	5.7709	1.23658	.16674
Total	165	5.1182	1.47666	.11496

 Table 27: Hypothesis Testing IV

#### ANOVA

Mean of Brand Equity Groups 3 & 6 & 7

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	48.624	2	24.312	12.747	.000
Within Groups	308.981	162	1.907		
Total	357.605	164			

## Table 28: Hypothesis Testing IV

#### **Multiple Comparisons**

Dependent Variable: Mean of Brand Equity Groups 3 & 6 & 7 Tukey HSD

		Mean Difference (I-		
(I) Group	(J) Group	J)	Std. Error	Sig.
Group III / Graphics S	Group VI / Color S x Graphics S	70000*	.26336	.023
	Group VII / Color S x Graphics S x Visuals S	$-1.32909^{*}$	.26336	.000
Group VI / Color S x Graphics S	Group III / Graphics S	.70000*	.26336	.023
	Group VII / Color S x Graphics S x Visuals S	62909*	.26336	.047
Group VII / Color S x Graphics S x	Group III / Graphics S	$1.32909^{*}$	.26336	.000
Visuals S	Group VI / Color S x Graphics S	.62909 <sup>*</sup>	.26336	.047

\*. The mean difference is significant at the 0.05 level.

Figure 17: Hypothesis Testing IV



The implications here are that the more ad elements are standardized, the higher will be the impact of the effect on the brand equity mean, however, the extent of the effect will be influenced based on the type and combination of ad elements employed in addition to the degrees of standardization (the number of standardized ad elements). Therefore, hypothesis IV was supported with a total of four hypotheses tests conducted with manipulation of various ad elements standardization.

To summarize, when one-component ad elements standardization (color or visuals or graphics) is added to a non-standardized ad campaign, no statistical significance is observed. When twocomponent ad elements standardization (color x visuals) or (color x graphics) or (visuals and graphics) is added to a non-standardized ad campaign, then there is a significant difference between the non-standardized ad campaign and the two-component ad elements standardization. There is also a significant difference between the non-standardized ad campaign and the threecomponent ad elements standardization even though the ad campaign turns into a one-off ad (repeat of one another). Hypothesis IV is supported. However, there are no statistically significant difference between the non-standardized ad campaign and the one-component ad elements standardization. However, there is a statistical significance found between the twocomponent ad elements standardization and the three-component ad elements standardization due to the importance of visuals standardization when added to the two other components of graphics and color standardization. As it will be discussed, the one-component ad elements standardization does not reach the impact threshold and once the third component ad element standardization is added to the two-component ad elements standardization groups, then the ad campaign turns into a one-off ad as if repeated three times in the digital magazine. However, a significant difference is detected exceptionally in this case on the mean difference of the brand equity ratings between the two component and the three-component standardization because of the weaker interaction effect between color standardization and graphics standardization and the high impact of visuals standardization when added as a third component. This is in contrast to the last two cases where graphics or color are added as the third component and no significant difference is found in between the means of the two-component and the three-component standardization. Therefore, through the comparison of the two-component and the threecomponent standardization, when visuals standardization is added to the latter two combination of color and graphics, then a significant difference is detected and hypothesis V is partially supported in addition to hypothesis IV through the latter experiment and ANOVA analysis.

### The Importance of Visual Standardization as a Global Strategy

In terms of various one-way ANOVA tests conducted, it appears that though color is a very important ad element in standardization of ad campaigns, however, it is the visuals and the graphics that provide the highest standard deviation for brand equity mean, however, the difference was not detected to be statistically significant. The comparison of the last two tests showed that combined graphics standardization and color standardization showed the weakest mean difference and visual standardization having 'the strongest effect' seemingly in combination with other ad elements. Though in neither cases any significant mean differences were found except when visuals standardization was added as the third component, then a significant difference was displayed between the mean of the two-component and the threecomponent standardization. This was the only two-component and three-component standardization that exhibited a significant statistical difference in brand equity mean due to the weak effect of graphics and color standardization combination and the strong effect of visuals standardization. Otherwise, the various ANOVA tests did not show a significant statistical difference between the groups within either the three-component ad element standardization levels, or within the two-component ad element standardization levels or within the single component ad element standardization levels. Therefore, hypothesis V was not supported through various ANOVA tests, while MANOVA tests provide support for hypothesis V and also through a comparison between the two- and three-component standardization when Visual standardization is added to graphics and color standardization then a significant statistical difference is detected in the mean of brand equity due to the overpowering impact of visuals. However, the above statistical analysis is indicative of the strong interaction of visuals standardization.

For hypothesis V to have been supported strongly, it was required to have a statistically significant difference between either the three groups of one-component ad element standardization; or a statistically significant difference between the three groups of twocomponent ad element standardization; or a statistically significant difference between the three groups of three-component ad element standardization. No such statistically significant difference was found and, as a result, hypothesis V was not supported through the various ANOVA tests. The statistically significant difference in the mean of brand equity could only be found once a one-component ad element group is compared to a two-component ad element group or a one-component ad element group is compared to a three-component group. There is also no significant statistical difference between the two-component groups and that of the three component ad element groups. Although hypothesis IV is supported, Hypothesis V is not supported because the mean difference is not found statistically significant even though it was clearly shown that visuals have the highest mean difference in combination with color and graphics, while graphics and color show the smallest mean difference. Therefore, despite the fact that visual component plays a very important role in standardization and that it shows a high mean difference, however, the statistical analysis does not show a significant difference between visuals, color or graphics either on their own or in equal combination with each other.

## Prior Cognitive and Affective Globality Reactions on Brand Equity

A Pearson Correlation is conducted to see if the respondents who measured higher on brand equity scale also reported higher scores on their prior cognitive and affective reactions to global brands as referred to as 'globality'. Brand equity scale and globality construct appeared to have a statistically significant linear relationship (p < .001). The direction of the relationship is positive (brand equity and globality constructs are positively correlated), meaning that these two scales

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tend to increase or decrease together. The magnitude or strength of the association is moderate (.3 < |r| < .5). Therefore, hypothesis VI is supported that prior 'globality' cognitive and affective reactions (brand globality predisposition) of those exposed to more standardized ad campaigns moderates positively the cumulative impact of the standardization of color, visual and graphic ad elements on brand equity ratings. Therefore, those who had more prior knowledge or stronger attitude toward the globality of brands in general scored higher on standardized ads and on brand awareness and recognition, brand associations, trust in the brand, willingness to purchase the brand and loyalty toward the brand and repurchase of the brand.

### Figure 18: Hypothesis Testing VI



The scale by Dimofte, et al. (2008) is more of a prior knowledge or emotional attitudes and feelings toward global brands or a globality sentiment generically and does not necessarily measure the comparative effectiveness of the standardization of the ad campaigns on the basis of ad elements as specifically as opposed to the brand equity measure of Yoo & Donthu (2001). The latter scale gauges advertising effectiveness in terms of awareness, associations, trust,

purchase intentions and brand loyalties while the former measures globality attitude. For that reason 'globality' (Dimofte, et al. 2008) is considered in this paper as a moderator and not a mediator or dependent variable that can be the consequence (brand equity measure) of standardization of ad elements. For this reason, in this paper globality measures are not summated with the brand equity's traditional measure of trust and loyalty.

However, to further examine globality as a mediator or dependent, MANOVA was conducted to analyze brand equity and globality simultaneously through General Linear Model and multivariate analysis of variance procedures to analyze the difference between the levels of the various groups as independent variables in relation to the linear combination of the two variables of brand equity and globality. As an approach to checking multicollinearity, the correlation between the two dependent variables must be low to moderate. Otherwise correlation of .60 and in some cases .80 or above are viewed as high and in that case the two scales could have been combined as one scale of brand equity or if it is low, then one of the two would be dropped. As a result of the correlations test in the previous pages, it was not necessary to resort to either decision of combining the two scales of brand equity and globality or dropping one. As the correlations above showed, the relationship is moderate and the cell numbers are rather equal that provides an ideal scenario for additional MANOVA tests by using brand equity scale as a dependent variable and globality as a moderator. The following hypotheses testing are undertaken in addition to the one-way ANOVA tests already conducted. Through MANOVA the globality scale will be used as a mediator / dependent instead of a moderator as in correlation test above.

The Box's Test of Equality of Covariance Matrices validated the homogeneity of covariance across the groups using p < .00. There is no concern here because Box's M (28.67) is not

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significant p (.134 >  $\alpha$  (.001). This means that there are no significant differences between the covariance matrices and because the assumption is not violated Wilk's Lambda can be used as a method of analysis for the MANOVA test.

Box's M	28.667
F	1.344
df1	21
df2	652481
Sig.	.134
hypothesi observed covarianc of the dep variables across gro	null s that the e matrices oendent are equal oups.
a. Desigr + Gro	n: Intercept up

Table 29: MANOVA Box's test of Equality of Covariance Matrices<sup>a</sup>

Before using Wilk's Lambda, Levene's Test of Equality of Error Variances was conducted. The *F* was not found significant p > .05 and the assumption is met for both brand equity and Globality variables: Brand equity .075 > .05 and globality .322 > .05.

Table 30: MANOVA Levene's Test of Equality of Error Variances<sup>a</sup>

	F	df1	df2	Sig.
Brand.Equity	1.860	7	427	.075
Globality & Aspirational	1.164	7	427	.322

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + Group

### Hypotheses Testing with MANOVA

A one-way MANOVA revealed a significant multivariate main effect for dependent variables relationship to various independent variables of standardization in terms of the number, types,

combination and degrees or extent of standardization of color, visuals and graphics. Wilk's  $\Lambda =$  .79 *F*(14, 420) = 7.802, *p* < .001, multivariate partial  $\eta^2 = .11$ . The significant *F* demonstrates that there are statistically significant differences among the various types, combination, number and degrees of standardized ad element components on a linear combination of the two scales of brand equity and globality.

		N/ L	-	Hypothe		c	Partial Eta	Noncent. Paramet	Observe d Power
Effect		value	F	sis ai	Error af	Sig.	Squareu	ei	u
Intercept	Pillai's Trace	.975	8193.0 <sup>b</sup>	2.000	426.000	.000	.975	16386.0	1.000
	Wilks' Lambda	.025	8193.0 <sup>b</sup>	2.000	426.000	.000	.975	16386.0	1.000
	Hotelling's Trace	38.465	8193.0 <sup>b</sup>	2.000	426.000	.000	.975	16386.0	1.000
	Roy's Largest Root	38.465	8193.0 <sup>b</sup>	2.000	426.000	.000	.975	16386.0	1.000
Group	Pillai's Trace	.219	7.502	14.000	854.000	.000	.110	105.028	1.000
	Wilks' Lambda	.786	7.802 <sup>b</sup>	14.000	852.000	.000	.114	109.235	1.000
	Hotelling's Trace	.267	8.103	14.000	850.000	.000	.118	113.441	1.000
	Roy's Largest Root	.242	14.788 <sup>c</sup>	7.000	427.000	.000	.195	103.518	1.000

Table 31: MANOVA Multivariate Tests<sup>a</sup>

a. Design: Intercept + Group

b. Exact statistic

c. The statistic is an upper bound on F that yields a lower bound on the significance level.

d. Computed using alpha = .05

Because the MANOVA is significant then the univariate ANOVA results which are the Tests of Between-Subjects Effects can be examined for results. Both univariate and multivariate tests provide measures of effect size (eta squared) and both were found significant. To see how differently the dependent variables of brand equity and globality vary for the independent variables of standardization, it is required to conduct Tests of Between-Subjects Effects. It was found that standardization of ad elements did have statistically significant effect on both brand equity scale (F(7, 435) = 14.5; p < .05 partial  $\eta^2 = .190$  and on Globality (prior cognitive and affective sentiments) as a mediator dependent: (F(7, 435) = 4.2; p < .05 partial  $\eta^2 = .064$  though as expected weaker effect due to the nature of the sentiment questions measuring globality.

Therefore, hypothesis VI was again supported.

				-	-				
		Type III					Partial	Noncent.	Observe
	Dependent	Sum of		Mean	-	<i>c</i> :	Eta	Paramet	d Power
Source	Variable	Squares	df	Square	F	Sig.	Squareu	er	
Corrected Model	Brand.Equity	159.51 <sup>a</sup>	7	22.787	14.442	.000	.191	101.091	1.000
	Globality & Aspirational	30.792 <sup>b</sup>	7	4.399	4.154	.000	.064	29.081	.988
Intercept	Brand.Equity	10545.6	1	10545.6	6683.46	.000	.940	6683.46	1.000
	Globality & Aspirational	14875.1	1	14875.1	14048.6	.000	.971	14048.6	1.000
Group	Brand.Equity	159.509	7	22.787	14.442	.000	.191	101.091	1.000
	Globality & Aspirational	30.792	7	4.399	4.154	.000	.064	29.081	.988
Error	Brand.Equity	673.752	427	1.578					
	Globality & Aspirational	452.120	427	1.059					
Total	Brand.Equity	11389.6	435						
	Globality & Aspirational	15367.2	435						
Corrected Total	Brand.Equity	833.261	434						
	Globality & Aspirational	482.912	434						

Table 32: Tests of Between-Subjects Effects / Hypothesis Testing VI

a. R Squared = .191 (Adjusted R Squared = .178)

b. R Squared = .064 (Adjusted R Squared = .048)

c. Computed using alpha = .05

However, the Eta squared and observed power is low for globality as a direct effect of the standardization, though it has a strong moderating or a correlation effect on brand equity scores as a result of standardization of ad elements as a globalization strategy.

The ANOVA between-subjects and Parameter Estimates table results led the investigation to determine whether the groups differ on each of these variables when examined alone. The ANOVA tests contribute to the understanding as to what type of ad element standardization, what combination of ad element standardization and what extent of standardization of ad elements will have an impact on the optimization of brand equity ratings. Univariate *Fs* were analyzed to grasp where the differences are when there is a significant multivariate *F*. ANOVAS

usually create type I error, while MANOVA by measuring the variables at the same time avoid type I error. For this very reason, it was attempted to re-test the standardization of ad elements with more robust testing and rigor of MANOVA and see if the high standard deviation found for the visual standardization versus color and graphic visualization can provide statistical significance. Parameter Estimates tests and multiple comparison tests were undertaken. Tukey HSD Post Hoc Tests were run and multiple comparisons were made. Because the MANOVA test was significant, multiple comparisons of pairwise groups were used to further support the hypotheses presented in this paper while having Type I error under control. The following tests evaluate the impact of standardization on the two dependents of brand equity scale (Yoo & Donthu, 2001), and globality scale (Dimofte, et al. 2008) whilst, the previous one-way ANOVA and correlation analysis tested the hypotheses on the basis of brand equity scale as the dependent and globality as a mere correlation.

A graphics standardized ad campaign when compared to a combined graphics and visuals standardized ad campaign, the mean of brand equity was found statistically significant (p < .05) with mean difference of -1.289. The Significant overall MANOVA Wilk's  $\Lambda = .79 F(14, 420) =$ 7.802, p < .001, multivariate partial  $\eta^2 = .11$ . and Tests of Between-Subjects Effects with statistically significant effect of dependent variable on brand equity scale (F(7, 435) = 14.5; p < .05 partial  $\eta^2 = .190$  and two single pairwise significant mean difference analysis supported hypothesis I, that those exposed to an ad campaign with standardized visuals versus an ad campaign with non-standardized visuals will rate the visually standardized ad campaign and the product advertised with higher brand equity mean.

## Table 33: Hypothesis Testing I

Multiple Comparisons									
Dependent Variable	e	(I) Group	(J) Group	Mean Differenc e (I-J)	Std. Error	Sig.			
Brand.Equity	Tukey HSD	Group III /	Group I / Color S	.2509	.23954	.967			
		Graphics S	Group II / Visuals S	.1085	.24064	1.000			
			Group IV / Color S x Visuals S	8711*	.24064	.008			
			Group V / Visuals S x Graphics S	-1.289*	.23954	.000			
			Group VI / Color S x Graphics S	7193	.24064	.059			
			Group VII / Color S x Graphics S x Visuals S	-1.329*	.23954	.000			
			VIII / No intended Standardization	0091	.24178	1.000			

A visuals standardized ad campaign when compared to a combined color and visual standardized ad campaign, the mean scores of brand equity was found statistically significant (p < .05), however, with smaller mean difference of -.9796. The Significant overall MANOVA Wilk's  $\Lambda =$ .79 *F*(14, 420) = 7.802, p < .001, multivariate partial  $\eta^2 = .11$ . and Tests of Between-Subjects Effects with statistically significant effect of dependent variable on brand equity scale (*F*(7, 435) = 14.5; p < .05 partial  $\eta^2 = .190$  and two single pairwise significant mean difference analysis supported hypothesis II that those exposed to an ad campaign with standardized color versus an ad campaign with non-standardized color will rate the color standardized ad campaign and the product advertised with higher brand equity mean.

### **Table 34: Hypothesis Testing II**

Multiple Comparisons						
Dependent Variable	2	(I) Group	(J) Group	Mean Differenc e (I-J)	Std. Error	Sig.
Brand.Equity	Tukey HSD	Group II / Visuals	Group I / Color S	.1424	.24064	.999
		S	Group III / Graphics S	1085	.24064	1.000
			Group IV / Color S x Visuals S	9796 <sup>*</sup>	.24174	.002
			Group V / Visuals S x Graphics S	-1.398*	.24064	.000
			Group VI / Color S x Graphics S	8278*	.24174	.015
			Group VII / Color S x Graphics S x Visuals S	-1.438*	.24064	.000
			VIII / No intended Standardization	1176	.24288	1.000

Graphics standardized ad campaign when compared to color and graphics standardized ad campaign, the mean scores of brand equity was not found statistically significant (p > .05) with mean difference of -.7193. This indicates that there is a pre-condition for hypothesis II to be supported and that color has to be standardized in combination with visuals standardization to elicit a significant difference. The Significant overall MANOVA Wilk's  $\Lambda = .79 F(14, 420) =$ 7.802, p < .001, multivariate partial  $\eta^2 = .11$ . and Tests of Between-Subjects Effects with statistically significant effect of dependent variable on brand equity scale (F(7, 435) = 14.5; p < 14.5.05 partial  $\eta^2 = .190$  and two single pairwise significant mean difference analysis supported hypothesis III that those exposed to an ad campaign with standardized graphics versus an ad campaign with non-standardized ad graphics will rate the graphically standardized ad campaign and the product with higher brand equity mean. However, color standardized ad campaign when compared to color and graphics standardized ad campaign, the mean scores of brand equity was not found statistically significant (p > .05). While one-way ANOVA showed statistical significance with the latter test, however, here with MANOVA, standardization of graphics and color provided no significant difference in brand equity mean. This finding shows that with

MANOVA hypothesis V is supported when graphics standardization is added to visual standardization with significant difference as opposed to adding graphics standardization to color standardization that showed no significant difference according to the charts above. The finding also affirmed that color and graphics standardization do not partner well on their own for leaving an impact on brand equity ratings, while visuals when combined with either graphics or color demonstrate statistically significant difference in the mean of brand equity. Therefore, MANOVA, for not suffering from type I error, supported hypothesis V while one-way ANOVA failed to support the same hypothesis, while, at the same time, MANOVA imposing a precondition for the support of hypothesis III.

It is important to note that as in the one-way ANOVA tests, in conducting MANOVA, it was also found that standardization of one of the ad element components be it either color, visuals or graphics on its own, individually, did not produce any mean difference of statistical significance unless at least two components of ad elements are standardized as in color and graphics; or visuals and graphics with the exception of graphics and color which indicated the importance of visuals in the ad-element combination of standardization. It was found that as long as two sets of ad elements are considered for standardization, then the impact on brand equity will be statistically significant on the basis of the type of standardization added and the degrees of standardization, however, no statistically significant difference was found among the two-component ad element combination of standardization of color and graphics standardization that, as a result, led to the support of hypothesis V and created a pre-condition for the support of hypothesis III.

The mean scores of brand equity were not found statistically significant (p > .05) among the various group comparisons of standardization combinations at the two-component levels of

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combined color and visuals standardization compared to visuals and graphics and compared to combined visuals and color. -.4179 and .1519.

Multiple Commenter

Multiple Comparisons						
Dependent Variab	le	(I) Group	(J) Group	Mean Differenc e (I-J)	Std. Error	Sig.
Brand.Equity	Tukey HSD	Group IV / Color	Group I / Color S	$1.1221^{*}$	.24064	.000
		S x Visuals S	Group II / Visuals S	.9796*	.24174	.002
			Group III / Graphics S	.8711*	.24064	.008
			Group V / Visuals S x Graphics S	4179	.24064	.663
			Group VI / Color S x Graphics S	.1519	.24174	.998
			Group VII / Color S x Graphics S x Visuals S	4579	.24064	.550
			VIII / No intended Standardization	.8620*	.24288	.010

## Table 35: Hypothesis Testing III

It was also discovered that an ad campaign with combined standardization of visuals and graphics (found significant) or combined standardization of color and visuals (found significant) as opposed to the combined standardization of graphics and color (not found significant) to have the strongest interaction effect when compared with other singular ad elements standardization components such as color, visuals or graphics with the highest mean differences as shown here respectively at 1.2891, 1.1221 and .7193. Considering the Significant overall MANOVA Wilk's  $\Lambda = .79 F(14, 420) = 7.802, p < .001$ , multivariate partial  $\eta^2 = .11$  and Tests of Between-Subjects Effects with statistically significant effect of dependent variable on brand equity scale (F(7, 435) = 14.5; p < .05 partial  $\eta^2 = .190$  and three single pairwise significant mean difference analysis all led to the support of hypothesis V that visual standardization moderates most positively in conjunction with either color standardization or graphic standardization in improving the brand equity ratings for the ad campaign and the product.

# Table 36: Hypothesis Testing V

Dependent Varial	ble	(I) Group	(J) Group	Mean Differenc e (I-J)	Std. Error	Sig.
Brand.Equity	Tukey HSD	Group V /	Group I / Color S	1.5400 <sup>*</sup>	.23954	.000
	·	Visuals S x Graphics S	Group II / Visuals S	$1.3976^{*}$	.24064	.000
			Group III / Graphics S	1.2891 <sup>*</sup>	.23954	.000
			Group IV / Color S x Visuals S	.4179	.24064	.663
			Group VI / Color S x Graphics S	.5698	.24064	.260
			Group VII / Color S x Graphics S x Visuals S	0400	.23954	1.000
			VIII / No intended Standardization	1.2800*	.24178	.000

### Multiple Comparisons

# Table 37: Hypothesis Testing V

### Multiple Comparisons

Dependent Variabl	e	(I) Group	(I) Group	Mean Differenc e (I-J)	Std. Error	Sig.
Brand.Equity	Tukey HSD	Group IV / Color	Group I / Color S	1.1221 *	.24064	.000
		S x Visuals S	Group II / Visuals S	.9796 <sup>*</sup>	.24174	.002
			Group III / Graphics S	.8711*	.24064	.008
			Group V / Visuals S x Graphics S	4179	.24064	.663
			Group VI / Color S x Graphics S	.1519	.24174	.998
			Group VII / Color S x Graphics S x Visuals S	4579	.24064	.550
		_	VIII / No intended Standardization	.8620*	.24288	.010

## Table 38: Hypothesis Testing V

Dependent Variabl	e	(I) Group	(J) Group	Mean Differenc e (I-J)	Std. Error	Sig.
Brand.Equity	Tukey HSD	Group VI / Color	Group I / Color S	.9702	.24064	.002
. ,		S x Graphics S	Group II / Visuals S	.8278 <sup>*</sup>	.24174	.015
			Group III / Graphics S	.7193	.24064	.059
			Group IV / Color S x Visuals S	1519	.24174	.998
			Group V / Visuals S x Graphics S	5698	.24064	.260
			Group VII / Color S x Graphics S x Visuals S	6098	.24064	.184
			VIII / No intended Standardization	.7102	.24288	.070

Multiple Comparisons

A pairwise comparison of various groups demonstrates that if ad elements are added to a visual standardized ad campaign, then any further standardization of ad elements of other components will induce a statistically significant difference (p < .05) in the mean of brand equity as opposed to the combined standardization of graphics and color. Hypothesis V is robustly supported.

As more ad elements are added as in the case of combined standardization of graphics, visuals and color a statistically significant difference is found again (p < .05) with mean difference of -13.329. The Significant overall MANOVA Wilk's  $\Lambda = .79 F(14, 420) = 7.802$ , p < .001, multivariate partial  $\eta^2 = .11$ . and Tests of Between-Subjects Effects with statistically significant effect of dependent variable on brand equity scale (F(7, 435) = 14.5; p < .05 partial  $\eta^2 = .190$ and two single pairwise significant mean difference analysis supported hypothesis IV that those exposed to an ad campaign with increasingly more ad elements standardized in various combinations of color, visuals and / or graphics versus an ad campaign with fewer standardized ad elements, will increasingly rate brand equity with higher mean. As in one-way ANOVA tests, it was demonstrated that as ad elements are increasingly standardized, it reaches a threshold level of diminishing return and from that point, the ad campaigns end up as one-off ads (all exactly the same). As a result, the pairwise comparisons showed statistically significant difference between a standardized color ad campaign and an ad campaign with combined standardized color and standardized visual ad elements (p < .0005). However, there was no statistically significant difference (p > .0005) between the combined standardized color ad campaign with that of the fully standardized ad campaign with standardized color, standardized graphics and standardized visuals with three components of ad elements. At a specific point of full standardization, the ad campaign turns into a one-off single ad as if repeated with the exact same color, graphics and visuals. At the same time, the fully standardized ad campaign provides statistically significant mean difference compared to non-standardized ad campaign or as compared to the ad campaign standardized with one type of ad-element component standardization.

Multiple Comparisons					
Dependent Variable	(I) Group	(J) Group	Mean Differenc e (I-J)	Std. Error	Sig.
Brand.Equity Tukey HS	Group IV / Color	Group I / Color S	1.1221	.24064	.000
	S x Visuals S	Group II / Visuals S	.9796*	.24174	.002
		Group III / Graphics S	.8711*	.24064	.008
		Group V / Visuals S x Graphics S	4179	.24064	.663
		Group VI / Color S x Graphics S	.1519	.24174	.998
		Group VII / Color S x Graphics S x Visuals S	4579	.24064	.550
		VIII / No intended Standardization	.8620*	.24288	.010

Table 39: Hypothes	sis Testing IV
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When the pairwise comparison of groups is done in relation to globality mediator as a dependent, then the fully standardized ad campaign was found statistically significant (p < .05) in the means difference of globality. The subjects that scored the highest on the globality scale were in the fully standardized ad campaign group. As opposed to the brand equity scale that was impacted even by the standardization of two types of ad elements either by standardization of combined color and visuals; or visuals and graphics; in the case of globality mediator / dependent it was only impacted by the higher standardization level of combined color, visuals and graphics. When a fully standardized ad campaign with color, visuals and graphics was compared to standardized color campaign with mean difference of .6303, standardized visuals campaign with mean difference of .9618 and standardized graphics campaign with mean difference of .6909 and a non-standardized ad campaign with mean difference of .7334, all were found statistically significant. It was demonstrated that the higher the standardization, the higher will be the globality mean or the tendency of the respondents to score higher on brand equity scale as they did also score higher on globality scale. The Significant overall MANOVA Wilk's  $\Lambda = .79 F(14, 100)$ (420) = 7.802, p < .001, multivariate partial  $\eta^2 = .11$ . and statistically significant effect of standardization of ad elements on Globality (prior cognitive and affective sentiments) as a mediator dependent:  $(F(7, 435) = 4.2; p < .05 \text{ partial } \eta^2 = .064$  (though as expected with weaker effect as compared to brand equity scale) and the four pairwise mean differences analyses supported hypothesis VI that prior 'globality' cognitive and affective reactions (brand globality predisposition) of those exposed to more standardized ad campaigns moderates positively the cumulative impact of the standardization of color, visual and graphic ad elements on brand equity ratings.

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## Table 40: Hypothesis Testing VI

Dependent Variabl	le	(I) Group	(J) Group	Mean Differenc e (I-J)	Std. Error	Sig.
Globality &	Tukey HSD	Group VII / Color	Group I / Color S	.6303 <sup>*</sup>	.19622	.030
Aspirational		S x Graphics S x Visuals S	Group II / Visuals S	$.9618^{*}$	.19713	.000
			Group III / Graphics S	.6909 <sup>*</sup>	.19622	.011
			Group IV / Color S x Visuals S	.3865	.19713	.510
			Group V / Visuals S x Graphics S	.4873	.19622	.205
			Group VI / Color S x Graphics S	.5050	.19713	.173
			VIII / No intended Standardization	.7334*	.19806	.006

### **Multiple Comparisons**

# Figure 19: Related to Hypothesis Testing VI

Brand.Equity



### Figure 20: Related to Hypothesis Testing VI

## **Estimated Marginal Means of Globality & Aspirational** 6.40 **Estimated Marginal Means** 6.20 6.00 5.80 5.60 5.40 -Group I / Color S -Group II / Visuals S -Group VII / Color S x Graphics S x Visuals S -VIII / No intended Standardizatior Group IV / Color S x Visuals S Group III / Graphics S Group VI / Color S x Graphics S Group V / Visuals S x Graphics S

#### **Globality & Aspirational**

The above two graphs not only summarize the MANOVA test of the two dependent variables of brand equity and globality, but also show how closely the two dependent variables responded in terms of the degrees of standardization of the ad elements. However, this paper treats globality not as a mediator or a dependent, but rather as a moderator for brand equity scale as a measure of advertising campaign effectiveness for evaluating the degrees of standardization on the basis of the number, type and combination of ad elements of visuals, graphics and color.

### **Reliability Test of Brand Equity Scale**

A reliability test was conducted to determine the Cronbach's Alpha. The first table shows the number of valid cases in the online sample. No missing data can be detected after cleaning the data. The unstandardized Cronbach's Alpha is .814 which is a solid showing of a reliability coefficients for our testing. Usually above .70 represents reliability. Also the fact that the Alpha

is below .90, it indicates that the items are not repetitious or that we have more items in the scale than are really necessary for an internally reliable measure of the brand equity.

## Table 41: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.814	.821	10

The Corrected Item Total Correlation in the The Item-Total Statistics is moderately high above .40 and the items in the brand equity make a good component of summated rating scale for brand equity. Therefore, there was no need for modifying or deleting any item with low correlation. Item 10 had to do with the certainty of purchasing only Berg that obviously showed lower correlation.

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Q1	43.68	147.287	.627	.450	.782
Q2	44.94	148.921	.485	.314	.802
Q3	43.79	146.655	.605	.414	.785
Q4	43.54	149.520	.544	.505	.792
Q5	42.47	154.992	.456	.473	.803
Q6	43.12	168.747	.469	.651	.802
Q7	42.73	169.423	.466	.635	.803
Q8	46.99	165.319	.478	.482	.800
Q9	45.80	159.229	.536	.541	.794
Q10	46.33	168.742	.346	.382	.812

**Table 42: Reliability Item-Total Statistics**
### **CONCLUSION OF RESULTS**

The prime purpose of this paper is to measure the impact of the standardization of color, visual and graphic ad elements on consumer-based brand equity. The study examined the impact of the degrees of the standardization on the basis of the type, combination and the number of adelement components on brand equity ratings. The study succeeded to measure the effectiveness of the standardization of ad campaigns at different levels as a result of the manipulation of the aggregate ad-element components.

This research addresses the prevailing concerns of the scholars by demonstrating how to standardize ad campaigns (Harris, 1994); and the study can be found of importance by the very fact that standardization remains relevant, timely and an on-going topic of discussion in scientific journals (Ford, et al. 2011); and ever-increasingly being stated that standardization has become more feasible than in the past in practice (Ford, et al. (2011). This paper attempted to develop a Theory of Standardization of Ad Elements as a Globalization of Ad Campaign Processes despite poor and scant application of strong conceptual and theoretical work in the past international advertising studies (Taylor, 2010). Through a number of one-way ANOVA and MANOVA tests it was demonstrated that standardization of ad elements in an ad campaign builds and strengthens brand equity. Scholars emphasized that standardization builds brand image (Mueller, 1992) and other relevant studies pointed to the importance of measuring brand image cohesiveness (Hsieh 2002) on the basis of the degrees of brand globalization (Mueller, 1989). The above conceptual and theoretical arguments around standardization provide the foundational theoretical framework for implying globalization of ad campaign processes through standardization of ad elements.

Visuals as a standardization component is considered a primal means and ways of associating a brand with global consumer culture to improve brand equity (Alden, et al. 1999) and to build preference and trust (Levitt (1983). Visuals through pictures and imagery convey globally shared meanings that strengthen brand equity (Steenkamp, et al. 2003). Standardization is about consistency which develops credibility (Aaker, 1996) through endurance, repetition and permanence (Kapferer,1992). The visuals can provide continuity with uniform imagery that are standardized to deliver the same look and feel with respect to brand identity (Aaker and Joachimsthaler, 2000). Standardized visuals are used from West to East (Okazaki and Mueller 2008) and from back then in the 60s when it all ignited in practice and academia (Buzzell,1968; Fatt, 1965; Roostal,1962; Elinder, 1965).

Other scholars have found models in ads as a form of visual standardization (Nelson and Paek, 2007) and the global phenomenon was viewed as a global mass culture and cultural production (Hall, 1997) that resulted in convergence in advertising appeals (Okazaki, et al. 2010, Taylor, et al. 1997). Standardized ads can transfer meaning (McCracken, 1986) through lifestyle imagery. Advertising information is processed through pictures (Unnava and Burnkrant, 1991) and modernity can be projected through globally-based brands (Holton, 2000) and global cosmopolitanism has taken over the world (Alden, et al. 1999). Due to the importance of global imagery, modernity and cosmopolitanism, visuals as a very important component of standardization was tested as part of hypothesis I, and it was found that those exposed to an ad campaign with standardized visuals such as global, cosmopolitan and modern images in a campaign versus an ad campaign with non-standardized visuals will rate the visually standardized ad campaign and the product advertised with higher brand equity mean.

ANOVA and MANOVA hypothesis tests demonstrated the pivotal influence of visual standardization in ad campaigns to build brand equity. MANOVA tests revealed the combined standardization of visuals and graphics as the two types of standardization components with the strongest interaction effect as opposed to other components combined in order to increase brand equity ratings. This finding was in support of hypothesis V that visual standardization moderates most positively in conjunction with either color standardization or graphic standardization in improving brand equity ratings for an ad campaign and the product advertised. MANOVA confirmed that standardization of visuals is more important than standardization of graphics or color (or graphics and color) because when standardized color was added to standardized graphics component of an ad campaign, no significant statistical difference was found in brand equity mean.

It was found that when a totally non-standardized ad campaign is used as a test and either visuals, graphics or color standardization component is induced, on its own individually, then no statistically significant difference can be found in the mean of brand equity ratings. The findings revealed that, at least, up to two aggregate standardization components of ad elements are required to reach the threshold point of leaving an impact on brand equity ratings. MANOVA revealed that the visuals component was the only standardization mechanism that had a statistically significant impact on the mean of brand equity in all standardization types and combinations with both graphics and color standardization components and supporting the vast literature in terms of the 'globalness' of lifestyles, pictures and imagery on the basis of cosmopolitanism and modernity as a visual example. Therefore, standardization of visuals component can be implied as an effective global strategy to build and strengthen brand equity through global ad campaigns.

Despite the importance of visual standardization as in the case of partnering with color standardization or graphics standardization, however, visual standardization, on its own, individually, as a single ad-element component, does not trigger an effect on brand equity for the very reason of not reaching the impact threshold. The key takeaway is that even strong visuals of Lionel Messi Soccer player in Gillette, Adidas or Pepsi requires accompanying graphics or color standardization to reach an impact point for communication effectiveness despite the inherent high influence and persuasiveness of such global personality endorsement imagery. It is not until the combined visuals and color standardization, or combined visuals and graphics standardization is employed before any substantial changes are detected in the campaign effectiveness and for the brand equity mean difference to be statistically significant. The findings reflect the reality of ad campaigns in practice. Advertisers in general, use standardization of visuals on packages, logo treatments, the models on the main body of an ad and the background effects of the ad campaigns as the key drivers for the standardization and globalization task. Furthermore, Graphics that incorporate typography and various logo treatments are employed by advertisers to standardize ad elements to ensure that the ads travel well through the cultural, social, psychological and economic bumps in the various international markets without confronting geographic-bound barriers.

Visuals have always played an important role in ad campaigns. Typography and related graphics together with visuals standardization can render a strong signature to ad campaigns. The fact that visuals and graphics intrinsically have their own consistent color, then by default and innately, the ad campaigns when consistent with visuals and graphics, then they do appear natively consistent with the same color, to some extent, even if the background color is changed as in this research project. In other words, the exhaustive or exclusive separation of the ad elements' or

components' standardization overlap becomes a grey line and painstaking attention to overlapping and inclusive operationalization of visual, color and graphic variables is required. ANOVA and MANOVA demonstrated that those exposed to an ad campaign with standardized visuals versus an ad campaign with non-standardized visuals will rate the visually standardized ad campaign and the product advertised with higher brand equity mean. Hypothesis I is supported.

The true definition of an advertising campaign as opposed to a static one-off ad has to do with some creative variation, in particular, in visuals and even in color and usually not much variation is noted in graphics or typography. Creative variation in major global standardized ad campaigns can be found in the form of slight alterations in visuals, sometimes, also in terms of a variety of hues by introducing modern and contemporary colors, while, hardly much variation or modification can be observed in graphics or typography for the very reason of maintaining a consistent imagery with an enticing, fresh and dynamic campaign look and feel. The research findings appear aligned with the reality of ad campaigns as developed on a global basis. Color could vary depending on how much of other ad elements are standardized as it has been the case with some Apple iPhone ad campaign. Nowadays, even logos have changed color as in McDonald's in Europe going green as opposed to the typical red and yellow of Ronald! Creative variation does take place in some elements of visuals and color in order to add novelty and excitement to ad campaigns or make it more relevant to some market sentiments, otherwise, if visuals, graphics and color are totally standardized then a one-off ad is the result as opposed to a vibrant ad campaign with nuances of creative and artistic variation. This is the case in this research as a drawback because the ad elements are composite components and degrees of creative variation within each component, in particular, in visuals, is not measured.

The second standardization component is color. It is said that color is under-theorized and attempts have been made to approach color theory and practice relationship within a framework of visual culture (Anne Dauppe, 2011). Color preferences and color psychology has been studied for long (Guilford, 1934). Many studies have focused on color meanings and preferences that are said not be consistent in different cultures (Madden, et al. 2000; Moore, et al. 2005) or higher value colors are found to be liked better (Sharpe, 1974). Studies have been conducted to identify what ideal colors are as a background for products (Middlestadt, 1989) for more effectiveness, such as red projecting heat and passion (Mille, 2014) or color having arousal effects (Walters, et al. 1982). Decision on color-choice is given importance (Bellizzi and Hite, 1992) and color is considered highly subjective and extensive empirical studies have been done on the effect of color on arousal (Gorn, et al. 1997) as the effects of colors have been studied on consumers (Crowley, 1993).

It appears that studies on color indicate that people respond differently to different colors and more so than people merely responding differently to color in different parts of the world. Therefore, the main task of marketers is to ensure the product, brand colors and brand imagery thematic colors are conveyed correctly and accurately through homogeneous ad campaigns. For this reason, the above theories and conceptual framework around color makes it essential to maintain a consistent color with all its values for global brands. Color standardization impact on brand equity ratings was examined. To test the hypothesis in respect to color standardization, a visuals standardized ad campaign was compared with an ad campaign with the combined standardization of color and visuals and it was found that color had a positive impact on brand equity ratings. Hypothesis II was supported.

However, the combination of color standardization and graphics standardization as a twocomponent standardization did not reach the impact threshold to improve brand equity ratings when MANOVA hypothesis testing was conducted. This finding signifies the importance of visual standardization and the fact that color and graphics standardization when not accompanied with standardization of visuals will not be as effective toward optimizing brand equity ratings.

Marketing organizations put a great deal of efforts into maintaining a steady and constant color in terms of the unchanging four primary colors of CMYK and in respect to the dependable color specs such as hue, value, saturation and Chroma. Then as a result of such elaborate executions, the correct and accurate global reds, blues and yellows are standardized within ad campaigns and throughout the global media.

Consistency in color can operationally have immense ramifications in terms of having a rigorous quality control on CMYK, cyan, magenta, yellow and black colors. Global companies with packaged goods products, FMCG (Fast Moving Consumer Goods) also known as packaged goods advertisers, and in other sectors such as services do heavily focus on standardizing the color of the logos, brands, products and various ad elements from the background to the foreground of produced material including the mnemonics and logos. Color goes beyond CMYK and other factors come into play such as color saturation, color value, color hue and color Chroma. Such aspects of colorization, as a whole, play an important role in building and maintaining a global look and feel in color and branding. Most ad agencies and marketers put a great deal of care in keeping color consistent in all advertising material online and offline and throughout time as red in Coca Cola, the green and yellow in Subway, the blue in Oral-B or the yellow and the red in Pirelli.

The findings that standardization of color, graphics and visuals, on their own, as one component do not have an impact on brand equity does not imply the lack of importance of these ad elements for standardization. The results merely indicated that standardization of either color, visuals or graphics, on its own merit over a non-standardized ad, if not combined with the standardization of other ad elements, it will not produce adequate required impact level to achieve a statistically significant and sizable effect in terms of brand equity mean difference. Therefore, Color, graphics or visuals standardization on their own were found not to have any statistically significant effect on brand equity means as a single ad-element component.

MANOVA showed no significant effect of color standardization when added to a nonstandardized ad campaign or added to a standardized graphic campaign. In other words, the standardization of either graphics or color on their own individually or even combined, without the standardization of the visuals did not induce any statistically significant effect. Therefore, for hypothesis II to be supported certain conditions must be met. Not only the number of ad element components, but the type and combination of ad element components were influential toward the support of hypothesis II. Color or graphics standardization has to be accompanied with visual standardization for hypothesis II to be supported.

The findings show that a pre-condition is required and that color standardization must be used in combination with visual standardization or with the combined graphic and visual standardization in order to build and strengthen ad campaign and brand equity. This pre-condition is meaningful because just for the ads in a campaign to have the same color do not render them consistent, standardized and global in look and feel and there must be something beyond similar color to build an ad campaign. Further, the graphic elements as important as they are, they seem to have had weak treatment power to induce adequately further effect on the brand equity mean because

they are void of visuals standardization. For standardization to take shape and leave an impact, a number of ad elements must be standardized for the effect to be noticeable and higher scores of brand equity to be elicited and for this reason components that are aggregate of numerous ad elements are devised as multi-item variables.

The above rationalization is probably more applicable and relevant to the methodology used in this research because the ads are tested online and the images are smaller than the usual size as in real magazines and the unnatural setting contaminates the validity and the reliability of the results. Additional ad-element components must also be standardized for color standardization to take effect. Further, it appears that a stronger treatment is required by having more ad elements standardized to reach a specific threshold for standardization effect to take place. This line of thinking supports the real world practice in standardization of advertising campaigns and a large number of ad elements from color to graphics and visuals are standardized in order to attain consistency and cohesiveness in global advertising.

It is not surprising for hypothesis II to be supported in conjunction with the use of visual standardization. Standardization of color plays a principal role in developing global advertising toward building brand equity for ad campaigns, products and brands in the global markets. Standardization of color is probably one of the most important aspects of the work in print, outdoor and video advertising in traditional media and online. Color is, perhaps, one of the single most fundamental ad elements of a campaign in the field of advertising responsible for standardization despite the findings. From an experimental research point of view, standardization of color is a treatment as an independent variable that can be well perceived by the subjects and the uniformity and the continuity of an ad campaign can be observed for a better observation as a cause for the desired effect of brand equity. The higher ratings of brand equity

as a result of standardization of color with visuals is indicative of the prevailing global standardization guidelines and implementation efforts to maintain color harmony and color consistency. Color standardization in combination with visuals and graphics remains the critical, tedious and painstaking task as undertaken by marketers and ad agencies for building and strengthening brand equity for ad campaigns and products on a global basis.

Beyond visuals and color, graphics also play a paramount role. Font size and type color influence on brand personality has been given attention (Grohmann, et al. 2013) and spatial separation of sentences for improving awareness and comprehension was experimented (Carver, 1970), and need for further study on type size and modes of presentation were encouraged (Moore, et al. 2005). The impact of type color and the background color was reviewed in the literature (Fernandez and Rosen, 2000) and other scholars accrued typographic legibility and clarity to better reading (McCarthy and Mothersbaugh, 202) and web banner colors in relation to type and background were also scrutinized (Moore, et al. 2005). It appears that typography and graphics can project personality and influence recall and comprehension. For that purpose, the standardization of such attributes becomes important for a global campaign. Graphic standardization which includes typography, logo features and the margin treatments was used as the third standardization factor. Graphics in combination with visual standardization demonstrated to comprise two most important components and having substantial effect on building brand equity. Graphics is the component that produces either the least effective or the most powerful combination of standardization factors depending on which other component it partners. When graphics component becomes the composite partner of color component, it will have the least impact on brand equity as a standardization device, while on the other hand, when graphics component becomes the composite partner of visuals, it will have most impact on brand

equity as a standardization mechanism. Graphics comprising primal ad elements such as logo position, logo treatment, logo size, border treatment, and typography from font size to type face, type family, kerning and leading as an aggregate component can have substantial impact on standardization of ad campaigns, in particular, when combined with visuals. Hypothesis III is supported that standardization of graphics has an impact on brand equity, however, with the precondition that at least two standardization components must be used and one has to be a visual component.

The degree of standardization is measured on the basis of the number of ad element components, type of ad-element components, the combination and the interaction of ad element components and accordingly hypotheses I, II, III, and V were supported with ANOVA and MANOVA and with specific pre-conditions as noted above.

The end result is that statistical analysis of the ad campaigns among the eight experimental groups encompassing no-ad element standardization component versus standardized one-component ad element standardization versus two-component ad element standardization and three-component ad element standardization demonstrated that color, visual and graphic standardization have a statistically significant impact on brand equity mean differences depending on the number, the type and combination of ad element standardization. As a conclusion, this research measures the degree and the extent of standardization on the basis of the most important and practical ad elements used in developing global ad campaigns.

The results disclose that graphics play a salient role in standardization of ad campaigns to project a global image. Graphics include logo size, logo position, logo treatment plus an array of typographic ad elements such as bleed, margins, typeface, type size, type family, type kerning and type leading. How important are they? If you have a specific image of Apple ads in your mind, then it is mainly due to typography! Steve Jobs would not have been able to bring billions of fans to McIntosh, I-phone and Mac Pro if it was not because of a stint as a typography student and because of his strong creative tendencies and feel for typography and graphics from the earlier times of McIntosh in the 80s. His work at an apple farm brought the world the brand names McIntosh and Apple, however, the product differentiation of Apple McIntosh from PC had to do with Steve Job's unique and extraordinary appreciation of typography which was defined by type face, type family, kerning and leading at the very start of the Apple venture.

The old age printers' California Box defined typography at the earlier stages of Gutenberg printing invention. Typeface, varying font sizes, kerning and leading defined the look and feel of the printed page. For that reason, kerning or leading respectively refer to the metal bits horizontally placed in between the letters or words or vertically placed in between the lines as used in California box. That is why leading is 'leding' from the metal lead and not 'leeding' as in leadership. New York Times still has the same look and feel because of the typography that it has retained throughout the decades. Many advertisers and publishers have adopted, adapted and updated their typographic and graphic imagery, however, once they embark on a specific graphic development or pagination, they maintain a standardized framework for a competitively differentiated design and a consistent look for their publishing and branding.

Some visual elements can be slightly varied as it has been a common occurrence in advertising and marketing of packaged goods and so can color in some very specific cases vary as long as the latter is not the product or the logo color (Dove grey for men, Dove white for women and European green McDonald as an exception while graphics kept basically similar). Graphics that incorporate typography appear to be the key ad elements employed to effectively standardize and give a global and consistent look and feel to a brand or product.

Hypothesis IV measured the degrees of standardization, specifically, in terms of the number of standardization components and their effects on brand equity. On the basis of the conceptual and theoretical framework of visuals, color and graphics, it was noted that marketers use a large number of ad elements to construct standardization in ad campaigns. The conceptual and creative idea has been to combine standardization of a number of ad elements, copy and design (Elinder, 1965) and verbal and visual elements (Okazaki and Mueller, 2008). Mueller's pioneering degree of standardization conceptualization is the basis for hypothesis IV. The proposed concept encompassing hypothesis IV hinges on the number of the standardization components of visuals, graphics and color added to an ad campaign and the measure of its resulting impact on brand equity ratings. It was tested and demonstrated that if, increasingly, further standardized ad element components are added to a visually standardized ad campaign, or to a graphics standardized ad campaign or to a standardized color ad campaign, then the resulting effect will produce a statistically significant difference in the mean of brand equity. Hypothesis IV was supported again with some pre-conditions. Therefore, degrees of standardization in terms of the number, type, combination and the interaction of ad element components was measured and tested and all the five hypotheses were supported with relevant and specific pre-conditions defined for this experimental research design that is relatively aligned with practice.

The overall analysis of the results demonstrates that one-component ad element standardization such as color, visuals or graphics over a non-standardized ad campaign has no impact on brand equity. Two-component ad element standardization comprising two of either color, visual or graphic components will have an impact on brand equity as compared with non-standardized ad campaign or ad campaigns standardized with one-component ad elements as long as visuals standardization is partnered with either graphics or color standardization. However, as standardization peaks in number, type and combination of ad-element components, then it reaches a retraction point or a diminishing return point and the standardization of ad elements no longer elicits a statistically significant difference in brand equity mean between the two-component and the three-component standardization. One interpretation is that once standardization goes too far and is overdone, the ad campaign literally turns into a one-off ad and all the ads look the same and it will no longer be an ad campaign with subtle variations in visuals, color or graphics. If the visuals component had been broken down into subsets of variables, probably the visuals would have looked similar with slight creative variation rather than looking exactly the same and the results would have been different. Some of the Amazon workers in the fully standardized ad campaign group even emailed back to comment if the survey had any mistakes for having had the same three ads placed in the digital magazine as a campaign!

The implications here are that the more ad elements are standardized, the higher will be the impact of the effect on the brand equity mean, however, the extent of the effect will be influenced based on the number, type and combination of ad elements employed. Therefore, hypothesis IV was supported with a number of hypothesis tests conducted with various ad elements standardization.

Though the standardization of visuals displayed the highest mean difference than color and graphics, however, one-way ANOVA results were not statistically significant to be reported and hypothesis V was not supported that visual standardization moderates most positively in conjunction with either color standardization or graphic standardization in improving the brand

equity ratings for the ad campaign and the product. However, MANOVA affirmed that visual standardization when combined either with color or graphic standardization then the impact on brand equity is statistically significant, while graphic standardization and color standardization together have the least impact on brand equity and the results are not significant.

The overriding purpose of this dissertation research is how to test the impact of color, visual and graphic standardization components on brand equity ratings, rather than coming up with generic, generalizable or specific statements of what ad-element component standardization is more effective than the other which is not the primary purpose for this research. This is because the effectiveness of the standardization of different components depend mostly on the product, the product category, the brand, the creative, the content, the product features, the positioning, the desired personality and a set of other factors that can influence the importance of color versus graphics or visuals for a specific ad campaign standardization. The main purpose of this research is to show that standardization of ad elements in an ad campaign can contribute to building and strengthening brand equity and that standardization is influenced by the number, type and combination of color, visual and graphic ad-element components. The conceptualization, the theoretical framework, the research design, the statistical methods and the findings of this dissertation lead to a viable paradigm and a new domain of experimental, survey, observational and case study research for future researchers for the purpose of measuring and testing the impact of standardization of ad elements on brand equity and other ad effectiveness measures, both in traditional and online ad campaigns that comprise visuals, graphics or video content.

In this paper, brand equity is used as a measure of standardization for achieving globalization of ad campaign effectiveness. To measure the moderating effectiveness of prior cognitive and affective reactions to globality, MANOVA was conducted and globality scale (Dimofte, et al.

2008) was used as a moderating dependent. The Equality of covariance Matrices validated the homogeneity of covariance across the groups and Wilk's Lambda was used. Levene's Test of Equality of Error Variances showed that a significant multivariate main effect was found for dependent variables of brand equity and globality scales relationship to the various independent variables of standardization in terms of types, combination and degrees of standardization of color, visuals and graphics. Hypothesis VI was supported that prior 'globality' cognitive and affective reactions as brand globality predispositions of those exposed to more standardized ad campaigns moderates positively the cumulative impact of the standardization of color, visual and graphic ad elements on brand equity ratings. This paper will provide a partial, yet a significant starting point for examining and evaluating the proposed Theory of Standardization of Ad Elements as a Globalization of Ad Campaign Processes.

The dependent variable for this research is consumer-based brand equity that is the advertising effectiveness measure for evaluating the standardization of color, visual and graphic ad-element components which are the independent variables. Using brand equity for measuring advertising effectiveness as a result of the standardization of the various ad element components makes conceptual, theoretical and practical sense. Nowadays, most marketers tend to talk and care about building and strengthening brand equity. Marketing communication appears to be playing a pivotal role in developing a brand's equity (Sternthal, 2001). In this paper, the measure for standardization will be brand equity scale (Yoo, et al. 2001) that is comprised of brand awareness (Aaker, 1996), brand associations (Keller, 1998; Steenkamp, et al. 2003), brand image (Kapferer, 1992), perceived product quality (Levitt, 1983), brand purchase intentions and brand loyalty (Aaker, 1996; Keller, 1998; Kapferer, 1992).

A reliability test was conducted to determine the Cronbach's Alpha. The unstandardized Cronbach's Alpha is .814 which is a solid showing of a reliability coefficients for the reliability testing. Also the fact that the Alpha is below .90, it indicates that the items are not repetitious or that there are more items in the scale than are really necessary for an internally reliable measure of the brand equity. The Corrected Item Total Correlation is moderately high above .40 and the items in the brand equity make a good component of summated rating scale for brand equity as higher-level measures of communication effectiveness.

What makes this paper different is that standardization is used as a proxy independent variable for the globalization processes of ad campaigns because one of the key purposes of standardization is the globalization of ad campaigns and measuring brand equity market by market to arrive at a brand's aggregate global brand equity measure. The dependent variable in this research is brand equity. The aim is the optimization of the desired effect of brand equity being transformed into brand equity measure of global brands in numerous markets for the benefit of consumers, marketers and stakeholders through this globalization process as a result of the standardization of ad campaigns. Therefore, the higher the degree of standardization, the higher the ratings for brand equity for each market and such standardization once implemented in global markets can exponentially increase global brand equity.

Globalization is a latent and non-visible conceptualization that is actualized as a reflection of the surrogate independent variable of standardization and is subjected to manipulation as standardization of visuals, graphics and color. Simultaneously, globalization of ad campaigns can be reflected by the aggregate brand equity ratings of the active markets that can be gauged by marketers one market at a time. The aggregate sum of the brand equity, market by market, can then be transformed and ascended into a measure of a global brand equity. Globalization of ad

campaigns, put it another way, is represented by categorical measure of standardization proxy and, at the same time, gauged by the proxy measure of brand equity that is morphed into global brand equity once brand equity is measured in numerous global markets one market at a time. Standardization leads to optimization of brand equity in each market and globalization is represented by standardization in various markets and measured through global brand equity which is simply the aggregate of brand equity measures in each of the active markets. Globalization of ad campaigns and globalization of markets is actualized and occurs through the standardization of markets and thereon realized through the measure of brand equity in a number of markets that the global marketer operates.

The research design in this paper for the study of standardization of ad element components is proposed as an effective approach toward systematically, methodically, scientifically and empirically examining standardization and globalization of ad campaigns toward the standardization and globalization of markets and optimizing brand equity of global brands through standardization as the prime objective of this dissertation.

Past standardization, globalization and international advertising and marketing communication studies have been scattered, non-conclusive and, in many cases, research programs were conducted without relevant operational definitions of standardization or globalization as a construct within a conceptual or theoretical framework. Most scholars focused on how globally the ads are perceived from a cultural, social, psychological, organizational and financial platform. In other words, how ads were standardized or adapted and perceived in terms of strategy and execution in US vs. India, China, Japan or Korea. Most international advertising and standardization investigations have been about cross-cultural studies and simple marketing standardization steps in packaging, and creative developments of the copy and the visuals in

general terms. Research has been abundant in the past on what to be standardized and what not to be standardized, and whether it should be standardized or adapted, however, not much was said in terms of what, how and why to standardize and globalize ad campaigns effectively.

Many of the studies in the past 60 years or so have not advanced the field of standardization and globalization in specific terms or to its full potential by not throwing light on what globalization is and its relationship to standardization and its effectiveness measures and the use of brand equity as a robust measure of ad campaign effectiveness. Scholars in international advertising and marketing have not focused on: 1) What, how and why to standardize for globalization of ad campaign purposes; 2) How to measure the effect of standardization, and; 3) Conducting the research experimentally as in this paper as opposed to descriptive and content analysis that have dominated most standardization and globalization research in the past. For one thing, because globalization has been an ambiguous, nebulous, non-palpable, multi-faceted and latent conceptual construct, it has not been studied properly and adequately in the field of international advertising. How can standardization relate and lead toward globalization? What is standardization and globalization of ad campaigns? What is standardization as the toolkit or the mechanism for globalization processes of a fully integrated ad campaign? The purpose of this paper has been to address partially some of these relevant questions on standardization and globalization of ad campaigns and brands.

The problem has been that many of the scholars failed to truly understand how standardization and globalization of ad campaigns take place and what processes are involved. Most scholars, except very few, understood globalization merely as a phenomenon and an effect and did not examine standardization as a set of processes providing creative and strategic treatments as the cause for that very phenomenon of the globalization of ad campaigns leading to brand equity

value in the global markets. Globalization without brand equity measures in various international markets cannot be observed and the extent of its occurrence is measured through brand equity ratings of numerous markets. This study provides the conceptual, theoretical, methodological and statistical design for a rigorous and robust approach and procedure to standardize ad campaigns for building and strengthening brand equity. Marketers can undertake the required research in all the concerned markets to measure the aggregate global brand equity. For example, scholars looked at aspirational lifestyle, modernity or cosmopolitanism solely as a phenomenon and dependent variable due to the effect of global content and media on societies. Standardization and globalization does not appear to have been studied as a strategic creative process and as an independent variable.

Even though the ad industry all along has been going through regular processes of standardization for the purposes of globalization of ad campaigns and working on global guideline books, kits and white paper documents, unfortunately, such important areas of standardization have not yet been well absorbed within the academic studies on standardization toward globalization of ad campaigns. The reason could have been twofold: First, the whole realm of ad element standardization is mistakenly viewed as a creative and possibly graphic design domain of study and not relevant to communication, advertising management or marketing studies; second, the prevailing disconnect and divide between academia and the industry that should be narrowed.

If there are no standardization, then there are no globalization of ad campaigns in terms of the assumptions and theoretical conceptualizations of this paper. Globalization of ad campaigns and brands is the purpose of standardization, and globalization is not necessarily the effect of standardization. Globalization of ad campaigns is also a concept that is defined operationally by

the measurement of brand equity in every single market that in turn transforms and ascends into global brand equity after the measuring of brand equity in various international markets as an aggregate. It all depends on how standardization and globalization of ad campaigns are defined and contextualized and for that reason it is very important to have detailed, meaningful, practical and applicable operational definitions within a conceptual and theoretical framework when standardization or globalization of ad campaigns is studied. Therefore, in many cases when globalization is studied as a dependent variable and the perception of that globality or globalness is measured, it is more of a dependent variable and a phenomenon. Many of the academic studies did not truly and substantially advance the science and the profession of international or global advertising and marketing for not examining standardization and globalization as an independent variable and as a process of building brand equity and global brand equity as a consequence. The profession also failed to advance standardization and globalization to its maximum potential because marketing organizations and ad agencies assigned more of an organizational and administrative role to the processes of standardization and globalization and at times limiting such tasks to the creative and production departments as opposed to the strategic management and marketing divisions.

What many international advertising researchers failed to address was what really standardization is. What really globalization is. What, how and why to standardize and globalize ad campaigns in the field of marketing and advertising is the core effort and the prime focus of hundreds of billions of dollars being spent on global advertising and media, new and old.

This paper provides an operational definition of standardization toward globalization of ad campaigns. As a result, both in practice and in academia, these concepts can be defined, refined and expounded upon as to what globalization is and how and why it is induced through

standardization as a means and ways of globalization of ad campaigns for future academic and professional research. Globalization of ad campaigns is achieved through standardization of ad elements for the desired effect of building and maintaining a strong brand equity in every single market of the world.

Lifestyle and modernity have mostly been studied and philosophized as a globalization phenomenon or an effect. This paper through its literature review and deduction of the hypotheses demonstrated that globalization of lifestyle and modernity can also be a strategic creative process by having lifestyle images of modernity standardized in visuals as a component of an ad campaign and, as a result, develop brand equity in various markets of the globe through transfer of meaning that encompasses modernity and cosmopolitanism for the brand. This paper offers a new research platform for properly and effectively studying standardization toward globalization and measuring the effects of standardization as a mechanism to increase the performance of ad campaigns in building brand equity for global brands in numerous markets.

Scientifically and from a research methodology and design point of view, most scholars studied standardization as a dependent variable, as a consequent or an effect, whereas, it was overlooked that standardization of ad campaigns is not necessarily a dependent or an effect. Such huge oversights for over half a century of international advertising and marketing were no fault of the scholars in academia, because supposedly it was and it still is the dependent variable that has received much attention and most commonly been acceptable and the focus of the international marketing communication studies for advancing knowledge and science.

Therefore, this investigative report conceptually and theoretically defines and explains standardization toward globalization of ad campaigns as a set of processes and as a multi-

featured construct that is an antecedent that is the very process of globalization of ad campaigns through standardization mechanics presented in this paper as the operational definitions of the ad elements. Standardization of ad elements with the purpose of globalizing an ad campaign is not an end to itself as an effect or a dependent, but rather, it is simply something done or manipulated that serves as a set of signals for communication performance. The goal is neither standardization, nor globalization of ad campaigns, but rather building brand equity in as many markets as possible toward a global measure of brand equity. Standardization is simply a mechanism or a means of achieving a unified look and feel in an ad campaign through treatment and manipulation of ad elements and then the goal is to achieve a series of communication objectives that starts at the lower-level brand awareness recognition to the higher-level measures such as brand purchase and brand loyalty that comprise the effectiveness metrics for standardization of ad campaigns.

Standardization of visuals, mnemonics, color, typography and graphics has been used as a global communication strategy by global marketers and ad agencies to globalize ad campaigns. Globalization of ad campaigns has been achieved through standardized aspiring global images of models (Shakira in Activia), standardized mnemonics (Energizer Bunny), standardized graphics (specific typography used by Apple and Clinic), standardized color (the red of Coke and the blue of the Crest). The subject matter of this study is standardization of ad elements for the purpose of globalizing ad campaigns through practical and culture-neutral ad elements and demonstrating its effectiveness as a measure of building and strengthening brand equity in various markets.

This research demonstrates through rigorous and robust hypothesis testing that standardization of ad campaigns as a result of the standardization of ad-element components can effectively and efficiently be employed by advertisers to add value and equity to brands. This paper contributes

to advancing the art and science of standardization of advertising and media, old and new, toward the globalization of integrated ad campaigns. Standardization as a global strategy or globalization of ad campaigns and markets works, hand in hand, efficiently and effectively to build brand equity, market by market. Ad campaigns can be conceptually globalized through standardization mechanics of inspirational photos, unified graphics and mnemonics that project specific looks and feels through exacting color component implementation. Standardization as a global ad strategy can be manipulated for differing and varied communication effects and can be measured and tested for effectiveness and optimization. Standardization for globalization of ad campaigns is implemented and achieved through ad element components of visuals, graphics, typographics and color.

The global factor in the measure of brand equity is the inherent aspect of standardization that is most important aspect of globalization of ad campaigns. This paper empirically establishes how to globalize ad campaigns through standardization of ad elements. Standardization is not the end game. Standardization is only a set of creative and strategic processes for the purpose of actualizing globalization of ad campaigns that are measured and realized through effectiveness metrics of brand equity scale and reflected more broadly through multi-market brand equity.

#### **FUTURE RESEARCH**

The domain of this study will broaden the area of research in standardization and globalization of advertising with the prime focus on standardization of color, visual and graphic ad elements that is unique to this investigation. Future studies can employ ad elements with multi-item constructs presented in this experiment for conducting research to improve advertising effectiveness and build brand equity through standardization of ad elements. Future researchers can take advertising standardization theory further by treating standardization as an independent variable as opposed to a dependent variable as covered unnecessarily and extensively in most scientific studies. The methodological and statistical design of this research will help to better understand how global ad campaigns are standardized and what kind of impact standardization of ad elements can have on advertising effectiveness. This paper demonstrates that degrees of standardization now can be studied at the strategic and executional ad element levels.

This research program offers a conceptual and theoretical framework for future researchers to direct international advertising and marketing studies toward practical and meaningful aspects of standardization that can mainly be phrased as what and how to standardize ad campaigns. Additionally, the investigators will be able to measure the impact of standardization as an independent variable by applying strong theories of ad effectiveness models as dependent measures in research and in practice.

Once the measurement components of this study as the independent variables are broken down into smaller units of visuals, color and graphics in the future studies, variations in creativity within a standardized format can be measured more accurately and robustly and the nebulous realm of creativity might be brought under the fold of empirical scrutiny for more compelling

creative thinking processes. The fact that multi-items of ad elements are incorporated in each of the proposed components, nuances in creative work can be missed out. For example, typography and graphics can each be a separate variable. Visuals can be broken down into pack shots, models and background settings. Color as well can relate to typography, background setting or the border lines. Further, the future studies can fine tune the effectiveness measures for brand equity (Aaker, 1996; Keller, 1998; Kapferer, 1992) to make it more relevant to evaluating degrees, types and combination of standardization. Ad campaign standardization is an important step toward adding further value to brand equity. Specific questions can be added to the brand equity questions that relate to the product features, personality and the specific content of the ad campaign.

This research study can be applied to TV, radio, billboards and online media. In the case of video ad campaigns on TV or internet, the final pack shot, the tagline, the product shots, the model shots, the length of the takes (each scene), the cuts, edits and transitions such as straight cuts or fades can be compared in addition to various ad elements discussed in this paper. The sound track, the jingle, the voiceover and sound effects are among other ad elements for video advertising standardization. In the case of internet, additionally, it can be studied if video, banners and the link to the brand's site are used concurrently and standardized in all markets. Studies in advertising standardization can go beyond the content and the standardization of the type of media can be surveyed as well. Is the brand using only TV, online, outdoor, only traditional and / or digital media as a vehicle for marketing communication? Such other strategies can further contribute to the standardization of ad campaigns and toward building brand equity of brands on a global basis. A fully integrated research project in the future can involve a complete media mix including the point of sales at the stores' level as a field survey

study. The research can be conducted among the professional advertisers and ad agency executives as well through a survey method to build expert-based brand equity in contrast to this research that took a consumer-based brand equity approach. The ad professionals in practice might have greater subconscious appreciation of the role of color, visuals and graphics in standardization and globalization of advertising and, as a result, better perceive the manipulation of the independent variables. In this case, more variance in means can be obtained through a survey with the advertising and marketing professionals than with the consumers.

Field survey can be used to study standardization and brand equity by considering a thorough ad campaign and media mix in the form of integrated marketing communication and media (IMC). For such research a content analysis of the real world advertising messages and media mix of a number of competitive brands will be recommended in addition to brand equity survey measures. The field study should focus on content analysis of the degrees of standardization of the ad campaigns of the various major brands on the basis of color, visuals and graphics and then to do a field survey of the various brands and measure the brand equity of the competing global brands in order to measure and evaluate the effect of the standardization of ad element components on brand equity. It is intended that this paper will provide a new realm and domain of study or an innovative paradigm in the areas of advertising standardization, globalization of ad campaigns and ad campaign effectiveness.

### **RESEARCH LIMITATIONS**

Whenever a research project involves new areas of studies and attempts to approach new communication paradigms and touches a new domain of study, then the findings can be subject to much weaknesses and criticism. This paper is just a starting point for a fresh and disruptive approach to studying standardization of ad element components and its effect on brand equity. This research is limited to print advertising. Print is only part of the overall media mix and is most probably one of the traditional media that is losing its importance compared to TV, radio, billboards and, in particular, online media. Though for the purpose of conducting this research, an online magazine was used and the media format makes it slightly relevant to online, however, the basics of the conceptualization of the ad elements relate to a magazine advertising even if it is presented online to the participants. On the positive side, most of the conceptual thinking can be applied to other media. In this research a digital magazine is used and the importance or the life cycle of such format can be subject to doubt as much as the actual magazine as a traditional medium.

The online magazine used for the test might not be as easy or user-friendly to some of the research participants and this can be another drawback. Three ads as part of a campaign are run in one magazine as opposed to running the ads in three or more different magazines or through a mix of media that is more the norm for running a global ad campaign. Further, the ads were not rotated at random to avoid exposure order bias. In the case of the non-standardized campaign group, the ads still remained very much similar and for that reason, the control group did not appear as neutral as it should have been, because even in that case the ads appeared still as part of a relatively standardized campaign and as a result yielding smaller mean differences.

Local, regional or global ad campaigns are not exposed to the consumers in one shot. The consumers and readers see ads in consecutive times and in various media and there are inherent media mix and sleeper effects that none are present in this research. The participants are exposed to three ads at one point of time and the research assumptions are that research subjects will pay attention to the ads and recognize subconsciously or consciously how standardized the ads are in the communication campaign and realize the nuances or the variations in the creative in between the ad treatments exposed to different groups. Further, assumptions are made that if the subjects are exposed to standardized ad campaigns, then the subjects will recognize the brand name and find the ad campaign to deliver more quality and inspiring products that follows the liking of the brand and product to brand preference that finally leads to purchase intention and brand loyalty. To overcome these integral validity and reliability problems, a longitudinal and fully integrated marketing communication campaign with old and new media mix in the real world through a field experiment (survey and content analysis) would have most certainly been more meaningful in scope. Such futuristic studies not only would address most of the weaknesses in the inducement of standardization and the perception of the treatment, but also would have provided a more meaningful measure of the standardization of ad element components and its impact on brand equity. Brand equity is not built within an experimental environment of approximately 20 minutes and with a couple of ads within the same digital magazine that hinders the validity and reliability of the research toward its power of generalization to natural circumstances and the real world. This research also does not address the theories of congruity or balance to reason out why standardized ads can actually build brand equity. Future researchers can take on all these challenges head on.

#### MSU IRB Human Research Protection Program

MSU's IRB Human Research Protection Program application was made and approved for official permission before conducting this research in the United States.

## STIMULI

## COLOR - VISUALS - GRAPHICS

## DEGREES OF STANDARDIZATION OF AD ELEMENTS IN EIGHT DIFFERENT CAMPAIGNS WITH EIGHT DIFFERENT GROUPS (EXPERIMENTAL & CONTROL GROUPS)

#### Figure 21: Color Standardization (Experimental Group I)



#### Figure 22: Visuals Standardization (Experimental Group II)



#### Figure 23: Graphics Standardization (Experimental Group III)



#### Figure 24: Color and Visuals Standardization (Experimental Group IV)



Figure 25: Visuals and Graphics Standardization (Experimental Group V)



#### Figure 26: Color and Graphics Standardization (Experimental Group VI)



Figure 27: Color, Visuals and Graphics Standardization (Experimental Group VII)



Figure 28: Color, Visuals and Graphics Non-Standardization (Experimental Group VIII)



APPENDIX

# ONLINE MAGAZINE AND QUESTIONNAIRE INTERFACE

#### **Figure 29: Instructions to the Participants**

We would like you to participate in this survey research by reviewing three ads in a digital magazine. You can see the ads by flipping through the pages of the digital magazine. Please pay attention to the look, feel and content of the ads, the product and brand advertised and not the magazine's content.

Before going over the digital magazine you will be asked to answer some questions about yourself which will be kept confidential. Further, you will have to go over the letter of consent and agree with it in order to continue answering the questions in this survey.

Please note that you cannot use a mobile device to complete this questionnaire because the digital magazine and the ads will not be noticeable due to smaller size and will bias the research results.

IMPORTANT: If you respond for the second time to a similar questionnaire (HIT) relating to this survey, you will be rejected and you will not receive a valid code for your payment.

### NEXT

**Figure 30: Demographic Questions on Workers** 

Gender		
⊘ Male ⊘ Female		
		Next


#### **Research Participant Information and Consent Form**

You are being asked to participate in this research study. Researchers are required to provide a consent form to inform you about the research study, to convey that participation is voluntary, to explain risks and benefits of participation, and to empower you to make an informed decision. You should feel free to ask the researchers any questions you may have.

Study Title: The Impact of the Standardization of Color, Visual and Graphic Ad Elements on Consumer-Based Global Brand Equity

Researcher and Title: Mark Carassi, Research Coordinator

Department and Institution: Advertising and Public Relations at Michigan State University,

Address and Contact Information: carassim@msu.edu

#### **1. PURPOSE OF RESEARCH**

- You are being asked to participate in a research study of advertising effectiveness.
- You have been selected as a possible participant in this study because you are randomly selected with consideration of demographic information.
- From this study, the researchers hope to learn how advertisements can be made more effective.
- Your participation in this study will take about 10 minutes.
- Your name has been provided through Amazon Mechanical Turk (AMT).
- If you are under 18 you do not qualify for this survey.
- In the entire study, 1200 people are being asked to participate.
- This is a university project for a doctoral program.

#### 2. WHAT YOU WILL DO

- You will go through a digital magazine with content and a few ads in it. You are asked to look at some of the ads to answer the question provided online. You will be requested to glance through the magazine at least two times. You will be asked questions regarding the ads in the magazine and not the content of the magazine. When we start asking you questions you will not be able to get back to the magazine and the ads. You can review the magazine up to 10 minutes if you wish. However, you cannot leave the page before two minutes that is the minimum required time for you to review the magazine.
- At the bottom right of the digital magazine you will see a note advising you the remaining time out of the two minutes after which you can go to the question section and answer all the 27 questions. When the one-minute minimum time is over, a click button appears requesting you to click to go to the questions to answer them at your leisure.
- The following 25 questions ask your opinion about specific statements on 10-point questions that will assess your opinion on a series of statements in respect to the ads you view in the digital magazine.
- As a gesture of goodwill and our appreciation of your participation in this experimental survey in addition to the monetary compensation as specified in this form, we can, upon your request send you the results of this research upon the completion of the report. Send your request for the results to mark.carassi@carassi.com

#### **3. POTENTIAL BENEFITS**

The researchers will benefit from this study by discovering what aspects of an advertising campaign can be effective in selling specific brands by providing product information and inspiring consumers. Your participation will be a major contribution to improving the art and science of communication and provides better means of strategic communication for governments, companies and institutions communicating with their target audiences.

#### 4. POTENTIAL RISKS

There are no potential risks associated or related to this study.

#### **5. PRIVACY AND CONFIDENTIALITY**

- The data for this project are being collected anonymously. Neither the researchers nor anyone else will be able to link data to you. The data for this project will be kept confidential.
  - The data will be kept confidential in central databases of computers with secure passwords and no other individual except the researcher will have access to it.

- The only persons that will have access to the data are the principal and the secondary researcher in this case and no other individuals will have access to the data even though they are coded and non-descriptive.
- Information about you will be kept confidential to the maximum extent allowable by law.
- The data will be stored in a password secure statistical analysis program and Excel sheets.
  - The following individuals will have access to the data:
    - Principal researcher and the secondary researcher.
    - Institutional Review Board (IRB).
    - Scientific Journals.
- The results of this study may be published or presented at professional meetings, but the identities of all research participants will remain anonymous.
- The data are collected via Internet and are being collected anonymously. For compensation purposes and confirmation of the qualifications of the subjects, AMAZON MECHANICAL TURK records the IP addresses of the participants according to their prior agreements.

#### 6. Your rights to participate, say no, or withdraw

- Participation is voluntary. Refusal to participate will involve no penalty or loss of benefits to which you are otherwise entitled. You may discontinue participation at any time without penalty or loss of benefits to which you are otherwise entitled.
- You have the right to say no.
- You may change your mind at any time and withdraw.
- You may choose not to answer specific questions or to stop participating at any time.

## 7. COSTS AND COMPENSATION FOR BEING IN THE STUDY

- There are no incurring costs to the participants under any conditions.
  - Procedures being performed for research purposes only will be provided free of charge by Amazon Mechanical Turk and the researchers.
- Amazon Mechanical Turk will compensate you according to their guidelines and agreements with you.
- You will be compensated for participating in this research about \$2 for completing this survey that is estimated not to take longer than 15 to 20 minutes.
- You will receive the amount in full from Amazon Mechanical Turk.

#### 8. Contact Information

If you have concerns or questions about this study, such as scientific issues, how to do any part of it, or to report an injury, please contact the researcher: 10 Brookfield Road, Oakville, Ontario, L6K 2Y5; mark.carassi@carassi.com; +1 416 219 9955.

If you have questions or concerns about your role and rights as a research participant, would like to obtain information or offer input, or would like to register a complaint about this study, you may contact, anonymously if you wish, the Michigan State University's Human Research Protection Program at 517-355-2180, Fax 517-432-4503, or e-mail irb@msu.edu or regular mail at 207 Olds Hall, MSU, East Lansing, MI 48824.

#### 9. Documentation of Informed consent.

Clicking the agreement box below means that you voluntarily agree to participate in this research study. An automatic today's date will accompany your agreement click. If you do not click the 'I agree' box you will not be able to continue and participate in this research.

You can print a copy of this letter of consent if you wish.

You are required to provide your agreement to go ahead with the questionnaire.



### **Figure 31: Instructions for the Review of Digital Magazine**

Please look at the three ads in the digital magazine and answer the survey questions. You have to review the magazine for at least one minute before you can start answering the survey questions. Flip through the digital magazine by clicking the cursor on the corners or the sides of the magazine.

Please make sure to look at the ads at least 3 times or more. The questions relate only to the three ads. The questions relate to the ads and not the content of the magazine.



### Figure 32: Online Digital Magazine with flipping of pages' effect

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# Figure 33: Sample of Ads inside the Online Magazine

## Figure 34: Main Body of the Questionnaire

On a scale from 1 to 10 please select your answer. If you strongly disagree with the statement choose 1 and if you strongly agree select 10.



On a scale from 1 to 10 please select your answer. If you strongly disagree with the statement choose 1 and if you strongly agree select 10.



On a scale from 1 to 10 please select your answer. If you strongly disagree with the statement choose 1 and if you strongly agree select 10.





On a scale from 1 to 10 please select your answer. If you strongly disagree with the statement choose 1 and if you strongly agree select 10.



On a scale from 1 to 10 please select your answer. If you strongly disagree with the statement choose 1 and if you strongly agree select 10.



On a scale from 1 to 10 please select your answer. If you strongly disagree with the statement choose 1 and if you strongly agree select 10.





On a scale from 1 to 10 please select your answer. If you strongly disagree with the statement choose 1 and if you strongly agree select 10.



On a scale from 1 to 10 please select your answer. If you strongly disagree with the statement choose 1 and if you strongly agree select 10.



On a scale from 1 to 10 please select your answer. If you strongly disagree with the statement choose 1 and if you strongly agree select 10.



12. I will buy Berg as a second choice:											
Strongly disagree	2	3	4	5	6	7	8	9	10	Strongly agree	
											Next

On a scale from 1 to 10 please select your answer. If you strongly disagree with the statement choose 1 and if you strongly agree select 10.



On a scale from 1 to 10 please select your answer. If you strongly disagree with the statement choose 1 and if you strongly agree select 10.



On a scale from 1 to 10 please select your answer. If you strongly disagree with the statement choose 1 and if you strongly agree select 10.





On a scale from 1 to 10 please select your answer. If you strongly disagree with the statement choose 1 and if you strongly agree select 10.



On a scale from 1 to 10 please select your answer. If you strongly disagree with the statement choose 1 and if you strongly agree select 10.



On a scale from 1 to 10 please select your answer. If you strongly disagree with the statement choose 1 and if you strongly agree select 10.





On a scale from 1 to 10 please select your answer. If you strongly disagree with the statement choose 1 and if you strongly agree select 10.



On a scale from 1 to 10 please select your answer. If you strongly disagree with the statement choose 1 and if you strongly agree select 10.



On a scale from 1 to 10 please select your answer. If you strongly disagree with the statement choose 1 and if you strongly agree select 10.





On a scale from 1 to 10 please select your answer. If you strongly disagree with the statement choose 1 and if you strongly agree select 10.



On a scale from 1 to 10 please select your answer. If you strongly disagree with the statement choose 1 and if you strongly agree select 10.





Figure 35: Amazon Code for Workers



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